

# Public Utilities

*FORTNIGHTLY*

Volume L No. 13



December 18, 1952

## THE ELECTRIC LIGHT AND POWER INDUSTRY LOOKING AHEAD

*By Bayard L. England*

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## Automatic Adjustment Clauses in Gas Rate Schedules Part II.

*By Edwin Fleischmann*

« »

## Is Urban Transportation in Danger of Collapse?

*By Henry E. Jordan*

« »

## Natural Gas for the Pacific Northwest?

*By John M. Bemis*

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# Public Utilities

## FORTNIGHTLY

VOLUME I

DECEMBER 18, 1952

NUMBER 13



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 deals for Federal and state regulation of both privately owned and operated utilities and publicly owned and operated utilities, on a fair and non-discriminatory basis; for non-discriminatory administration of laws; for equitable and non-discriminatory operation; and, in general—for the perpetuation of the free enterprise system. It is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.

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# SPEEDING STEAM POWER

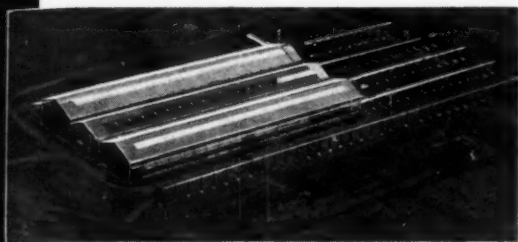
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& WILCOX**



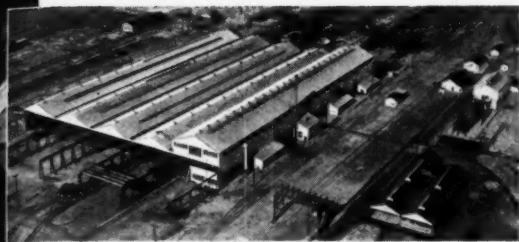
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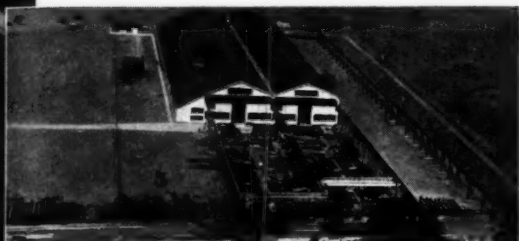




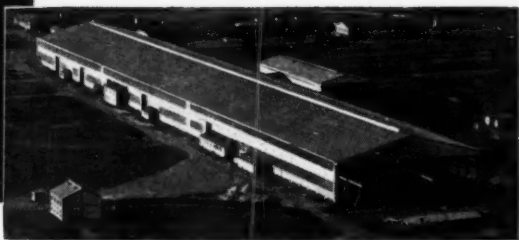
Paris, Texas



Wilmington, North Carolina



West Point, Mississippi



Brunswick, Georgia

## FOUR NEW FRONTS

America's industrial growth is measured in kilowatts, units of electrical energy which make up the brawn and sinew of U. S. production. More and more of these energy units are being consumed in this land which is, characteristically, always building, always pioneering. In fact, so many lusty, bawling industrial infants—children of America's men of vision—are growing up so fast that Babcock & Wilcox is pouring millions of dollars into new plants and equipment to provide more steam power for public utilities and for

all industry. New plants at Wilmington, N. C., West Point, Miss., Brunswick, Ga., and Paris, Texas, recently have been added to B&W's network of facilities for manufacturing the equipment to harness energy through the driving force of steam. In all, ten great B&W plants, spotted around the map like sentinels helping to guard the nation's strength, are efficiently geared to continue to contribute to America's boundless potential.

## Pages with the Editors

THERE probably never was a time in the fairly short history of the electric utility industry when the future contained so many question marks. Its emergence from a laboratory novelty to a basic necessity of modern civilization within a period of three-quarters of a century could have been forecast many years ago. Its advances in technology, physical expansion, and economic operation might have been predicted, within a reasonable range of certainty by qualified experts, two or three decades ago.

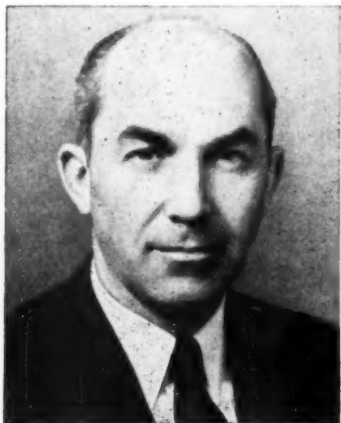
BUT using this waning year of Our Lord in December, 1952, as a starting point, it would be a bold prophet indeed who could say what the fate or status of electric utilities will be within such a short range as five years from now! The industry finds itself, today, beset by an unusual concatenation of circumstances—technical, financial, political, economic, and even international. All pose gigantic question marks which loom just over the horizon for the electric utilities. How soon nuclear energy? Will there be war or peace? How will the contest between rising costs and rigid rates end? Does the change of administration presage a stop, or slowdown, in government com-

petition which has seriously threatened the industry with eventual Socialism? Has the industry finally arrived at a basic foundation for universal public good will as compared with the criticisms of the past?

THE answers to any of these questions could greatly improve or greatly discourage the industry's outlook, depending on whether they prove to be good or bad answers. A combination of good answers might well usher in a golden age for the electric utilities as the crowning jewel of American industry and the enterprise system. A combination of bad answers could obviously wreck it, as an industry, beyond repair. Hence the importance of industrial leadership at this time.

CERTAINLY, then, this is no time for faintheartedness on the part of those who have been chosen to lead the electric utility industry. Fortunately, the industry now finds itself with a generation of leaders who do not hesitate to think, act, and speak boldly, according to their honest convictions.

ONE such leader is the president of the industry's national business organization, the Edison Electric Institute. During the past six months, almost since he was elected head of the EEI at the institute's twentieth annual convention in Cleveland, Ohio, last June, BAYARD L. ENGLAND has spoken out for the industry in a series of addresses and statements. He has aggressively promoted the idea that the electric utilities of the United States are, and by right ought to be, worthy and honored members of the nation's most valued industrial family. The leading article in this issue is a selection or distillation, so to speak, of a number of fine things which Mr. ENGLAND has said and which we felt should be collected in one place. Following our suggestion and invitation, Mr. ENGLAND was very glad to do this.



BAYARD L. ENGLAND



## What goes on at this Round Table?

• They could be exchanging ideas on new financing . . . discussing the cost of new money . . . hearing an expert appraisal of long-term trends for utilities.

Those present, in addition to the public utility executives, include experts from investment banking institutions, insurance companies, rating agencies—and from numerous other types of financial organizations.

Yes, this is a typical Public Utility

“Round Table” at the Irving. Last year alone, 146 representatives from 85 utility companies attended these sessions.

These “Round Tables,” now going into their sixth year, are one of the ways we seek to serve the public utility industry. As specialists in this field, we are constantly on the lookout for ways to be of practical help. If your company has an unusual problem, that’s the kind of challenge we welcome.

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MR. ENGLAND's personal career has been with the Atlantic City Electric Company, of which he has been president and general manager since 1948. Born in Newark, New Jersey, in 1903, he graduated from Temple University in 1922 and thereafter joined Atlantic City Electric as a clerk, rising to distribution engineer two years later. Thus, despite thirty years of service with the same organization he is today one of the youngest men ever to hold the presidency of the EEI.

\* \* \* \*

JOHN M. BEMIS, a free-lance writer of Spokane, Washington, has given us an entertaining and informative story about the various maneuvers to date in opening up the Washington and Oregon section to natural gas service. MR. BEMIS is a correspondent for a number of business periodicals, mainly McGraw-Hill publications. He has been engaged in newspaper work in Michigan, Wisconsin, and Spokane, Washington, since 1921.

\* \* \* \*

IT is becoming trite to say that the trouble with the traffic problem is too many automobiles. But that is neither a joke nor a tired cliché as far as the harassed transit industry is concerned. In a number of our cities we seem to be approaching the point where actual curtailment on the free use of private automobile transportation, at least during rush hours, may be the only alternative



HENRY E. JORDAN

DEC. 18, 1952



JOHN M. BEMIS

to eventual collapse of public transportation systems. The article beginning on page 903 is a frank discussion of such possibilities.

THE author is HENRY E. JORDAN, chief engineer and secretary of the Long Beach, California, Bureau of Franchises and Public Utilities. Following his graduation in electrical engineering at the University of Southern California, MR. JORDAN served as an engineer with the Westinghouse organization and the Pacific Electric Railway Company. He also served on the staff of the Los Angeles Railway Corporation, where he was superintendent of equipment for nearly fifteen years. He has been more recently assistant vice president for the Key System in Oakland, and did a major survey of the municipal transit system of San Francisco before taking his present post with the city of Long Beach.

\* \* \* \*

WE take pleasure in extending to all our readers and friends the season's greetings—a very merry Christmas indeed and a happy and prosperous New Year.

THE next number of this magazine will be out January 1st.



*The Editors*



*Public Utilities Fortnightly Extends to  
Its Many Patrons and Readers  
Cordial Good Wishes for  
Christmas and the  
New Year.*

# Coming IN THE NEXT ISSUE



## **THE WASHINGTON OUTLOOK FOR PUBLIC UTILITIES—1953**

Probably at no time in the last two decades has the future of government-business relations in Washington been so clouded with question marks—as the New Year ushers in the Eisenhower administration. Here is an analysis of the possible consequences of developments in Congress and in the Federal agencies respecting various utility industries as far as they can be foreseen by an experienced observer in the nation's capital. Francis X. Welch, managing editor of PUBLIC UTILITIES FORTNIGHTLY, who has regularly written the "forecast" article at the beginning of each year, gives us ten new predictions for the year 1953, along with reasons why he thinks they will come to pass.

## **UTILITY REGULATION BY THE STOCK MARKET**

Basing the allowable return for public utility companies on past cost of money as distinguished from conventional rate base approach has led to a controversial discussion in both financial and regulatory circles. Some experts think that the criteria established by the Federal Power Commission and several state commissions in adopting cost of money as a determinative factor looking to return allowance, is tantamount to regulation by the stock market. John H. Bickley, Chicago public utility consultant, as well as a veteran of both Federal and state regulation, and more recently an operating utility executive, has some interesting things to say about this subject on the basis of his personal research and analysis.

## **OPERATING RATIO—A REGULATORY TOOL**

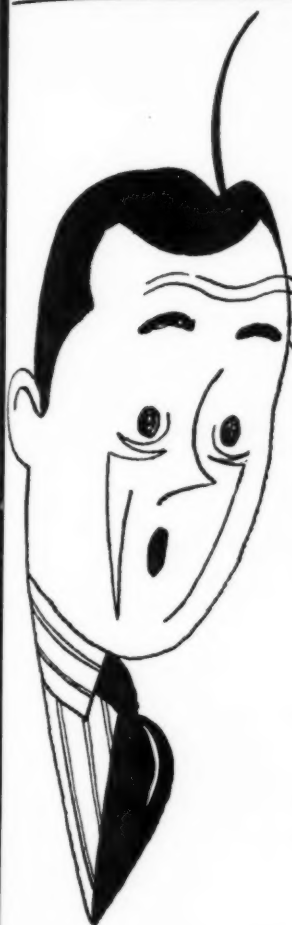
Facts and figures show that the conventional return on investment does not adequately compensate the transit industry for the risk involved in modern-day operation. The transit business is no longer a protected monopoly. The situation calls for a new approach if new capital is to remain interested in transit property investment. Charles Alan Wright, economics professor of the University of Minnesota, shows us how the "operating ratio" theory of relative expenses to revenues is the obvious regulatory tool in the present situation.

## **A HARD LUCK CLOVER LEAF FOR UTILITIES**

If your town blossoms into highway intersection clover leaves, there will be changes in utility plant that take money, but it will not earn its keep. What will happen to downtown—and will you ever be able to build freeways as fast as Detroit builds cars? James H. Collins, well-known southern California author and editor, has been giving his attention to the costs and upkeep involved in the current vogue for building clover-leaf intersections.



**Also . . .** Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.



# Just half the cost?

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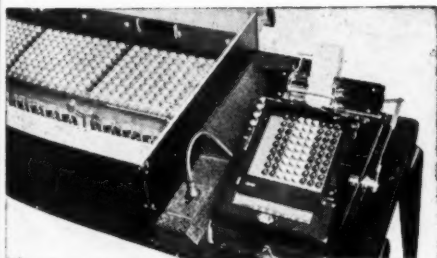
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# Remarkable Remarks

*"There never was in the world two opinions alike."*

—MONTAIGNE

ROBERT F. WINDFOHR  
*President, Texas Mid-Continent Oil  
and Gas Association.*

"We have to send dollars to hunt oil. We cannot send patriotism, OPS directives, government reports, or resolutions."

WILLIAM WHITE  
*President, Delaware, Lackawanna  
& Western Railroad.*

"Today we have the responsibility to lead the fight that will reverse the trend, to the great benefits of all business and of all the public."

LAURENCE F. LEE  
*President, Chamber of Commerce  
of the United States.*

"It is well known, that the road to economic dictatorship is usually littered with the bones of free enterprise utilities that government has consumed along the line of march."

M. S. RUKEYSER  
*Columnist.*

"The new business logic is that, in an era of inflexible costs and a high break level point, it is prudent to be lavish on expenditures which will promote sales to a level needed to carry on operations in the black."

GWILYM A. PRICE  
*President, Westinghouse Electric  
Corporation.*

"A basic responsibility of management is to manage its business successfully, but in achieving this goal, it is the responsibility of management to maintain a fair balance between employees, stockholders, and customers."

WADE E. SHURTLEFF  
*Industrial relations director,  
Standard Products Company.*

"Remember, you can't legislate loyalty and good workmanship—either in Federal regulations or labor contracts. Your employees will be the same the day after the presidential election as they are today. Humanization will do the trick—and pay off."

HARRY FLOOD BYRD  
*U. S. Senator from Virginia.*

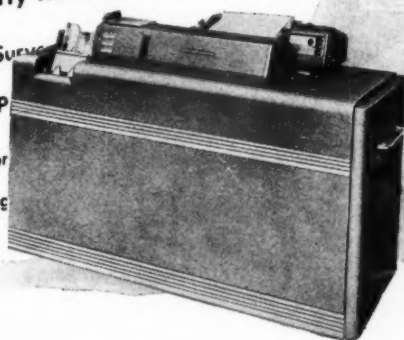
"Our free enterprise system is the greatest deterrent in the world to Russian aggression. It is this system which is our first line of defense. Our armies, navies, and air forces are merely the tools through which the strength of this system is applied in war."

WILLIAM J. GREDE  
*President, National Association of  
Manufacturers.*

"American full employment is based on the dynamic ingenuity of free people and not the slavery of government domination. . . . Today, as in 1945, the best thing the government can do for full employment is to stop interfering with free people who want only to invent, to build, to manufacture, to distribute, and to sell goods to one another."

Purchase Analyses  
 Ledgers • Insurance Records  
 Surety Deposit Records • Meter Test Records  
 Meter Control Records • Construction Accounting  
 Stores Accounting • Wage Studies • Accident Records  
 Merchandise Accounting • Collection Records • Fuel Records  
 • Accounts Receivable Control • Savings and Loan Accounting  
 Expense Distribution • Financial Reports • General Ledgers  
 Service Billing • Revenue Accounting • Payroll Accounting  
 Accounts Receivable Accounting • Government Tax Reports  
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39  
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## REMARKABLE REMARKS—(Continued)

**LEWIS HANEY**  
*Columnist.*

"[The] huge tax bill represents the cost of government, and the cost of government is the price of Socialism. The more the government does for us, the less we do for ourselves. That is Socialism. So when you worry about your cost of living or taxes, you are really concerned about Socialism."

**EDITORIAL STATEMENT**  
*Farm Journal.*

"Shall we Americans become subordinate to our government and be pushed around by it? Or shall we insist that our government shall be our servant? . . . Shall this America be the land of opportunity, or merely a land of uneasy, dependent security? Deny it as they may, that is the road to serfdom."

**PERRY M. SHOEMAKER**  
*President, Delaware, Lackawanna  
& Western Railroad*

"The present chaos in transportation regulation, and its very real threat of socialization, stands as a challenge to the statesmanship of American business. Responsibility for action rests primarily upon business leadership in this important matter, and I believe early forthcoming events will challenge that same business leadership to stand up and be heard on the economic salvation of our country."

**ROY G. INGERSOLL**  
*President, Borg-Warner  
Corporation.*

"These three major forces are operating against incentives to the development of business enterprise, crippling the productivity which you are here to foster: the towering peak of taxation; the labor monopoly which has attained the power to turn on or turn off our national economic machinery as if by a simple pull of a switch; big government whose insidious growth threatens our very precious human freedom."

**H. E. HUMPHREYS, JR.**  
*President, United States Rubber  
Company.*

"Opinion surveys have repeatedly shown that large groups of the American people misunderstand the rôle of profits, competition, capital, incentive, stockholders, management, and other vital parts of our opportunity system. Most men believe in freedom and in America as a land of opportunity, yet they are easily misled into supporting government planning and policies that work against free enterprise and toward Socialism."

**FREDERICK A. HESSEL**  
*National treasurer, American  
Institute of Chemists.*

"Before the nineteenth century progress was largely the result of chance discoveries. During the last hundred years, it has been achieved by invention made to solve specific problems. We have now reached the point of planning for the future, and, unfortunately, it is not the scientists who are doing most of the planning. It is time that scientists pick up their share of the burden and offer the particular assistance which they alone can give. Tomorrow is going to be a total synthesis of the past, present, and future. The scientist equipped to analyze those elements and to foresee their interactions should at least have a share in their development."

*This Identifying Statement is not an offer to sell these securities. They are subject to the registration and prospectus requirements of the Federal Securities Act. Information about the issuer, the securities, and the circumstances of the offering is contained in the prospectus which must be given to the buyer and may be obtained from such of the several Underwriters as are registered dealers in securities in this State.*

## New Issue

November 26, 1952

1,155,730 Shares

## COMMONWEALTH EDISON COMPANY

## \$1.40 Convertible Preferred Stock

(Cumulative—Par Value \$25 Per Share)

**Business.** The Company is a public utility supplying electricity in Chicago, and its subsidiary, Public Service Company of Northern Illinois, is a public utility supplying electricity and gas in the northern part of Illinois outside of Chicago.

**Conversion Privilege.** The Preferred Stock will be convertible into Common Stock on a share-for-share basis on or after December 31, 1952, subject to adjustment in certain events.

**Redemption.** The Preferred Stock will be redeemable in whole at any time or in part from time to time at the option of the Company, initially at \$32.50 per share and accrued dividends.

**Legal Investment.** Counsel for the Underwriters have furnished them with an opinion to the effect that the Preferred Stock qualifies as a legal investment for New York State savings banks under provisions of the Banking Law of that State now in force.

**Offering.** The Company is offering the holders of its outstanding Common Stock the right to subscribe, prior to 2 P.M., Chicago time, on December 10, 1952, at \$31 per share for the above shares at the rate of one share of the Preferred Stock for each 12 shares of Common Stock held of record on November 24, 1952. The several Underwriters have agreed, subject to certain conditions, to purchase any unsubscribed shares.

*During the subscription period the several Underwriters may publicly offer shares of the Preferred Stock at prices which will be within the limits set forth in the Prospectus. The offering price at any time may be obtained from Underwriters who are registered dealers in securities in this State.*

**Listing.** Application has been made for the admission of the Rights to trading on the New York and Midwest Stock Exchanges and for the listing thereon of the Preferred Stock upon notice of issuance.

## Glore, Forgan &amp; Co.

## The First Boston Corporation

Harriman Ripley & Co.  
IncorporatedA. G. Becker & Co.  
Incorporated

Blyth &amp; Co., Inc.

Central Republic Company  
(Incorporated)

Goldman, Sachs &amp; Co.

Harris, Hall & Company  
(Incorporated)

Kidder, Peabody &amp; Co.

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Union Securities Corporation

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A. C. Allyn and Company  
Incorporated

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The surest proof of customer satisfaction for any product is a repeat order. And on major equipment, such as steam generators, customer acceptance means satisfaction from planning through actual operation.

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CENTRAL ILLINOIS ELECTRIC and GAS CO. ....	5 UNITS
CENTRAL IOWA POWER COOPERATIVE .....	2 UNITS
MONSANTO CHEMICAL CO. ....	4 UNITS
NORTHERN STATES POWER CO. ....	2 UNITS
STUDEBAKER CORPORATION .....	3 UNITS
WEST VIRGINIA PULP and PAPER CO. ....	2 UNITS

These installations are another example of Foster Wheeler's ability to design, engineer, fabricate and construct power producing equipment to meet your needs.

Cross-section of latest stoker-fired steam generator designed for Central Illinois Electric and Gas Co., Sabrooke Generating Station, Rockford, Illinois.

CAPACITY .....	300,000 lb per hr
PRESSURE .....	950 psig
FINAL STEAM TEMPERATURE .....	875 F
FEED TEMPERATURE .....	350 F

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2 W

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### GASAPACK . . . THE ONLY REALLY NEW GAS CONTROL

**Completely Silent**  
Gasapack eliminates "barg-on, barg-off" flame ignition and extinction noises, common to ordinary "snap action" controls. Positive — but quiet.



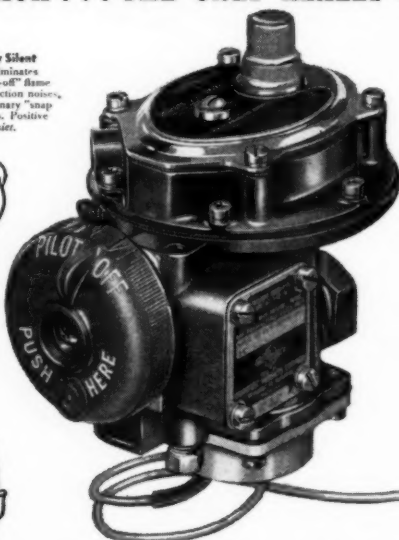
**Completely Adaptable**  
Design allows instant conversion of manual unit to electric thermostatic or mechanical Thermomatic operation, with no change in basic unit.



**Two-Stage Flame Control**  
Gasapack's exclusive intermediate flame principle "stages" flame for steady, even heat control, without violent swings.

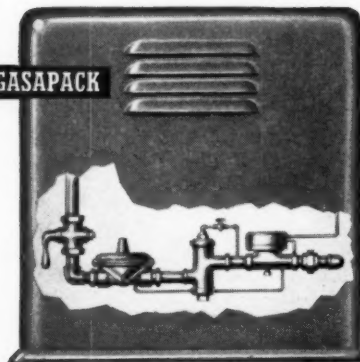


**One Simple Unit**  
Combines all necessary controls in one compact unit, easy to install . . . simple to service and efficient in operation.



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Better roads mean a better America

## INTERNATIONAL INTERNATIONAL TRUCKS "Standard of the Highway"



International L-130 series with special service-utility bodies—115 and 134-in. wheelbases. GVW's from 6,800 to 8,600 lbs.

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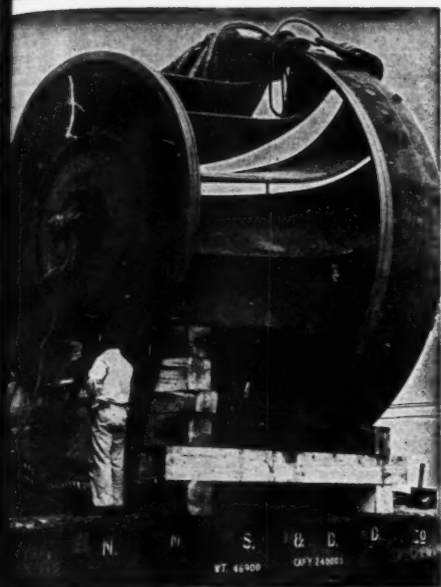
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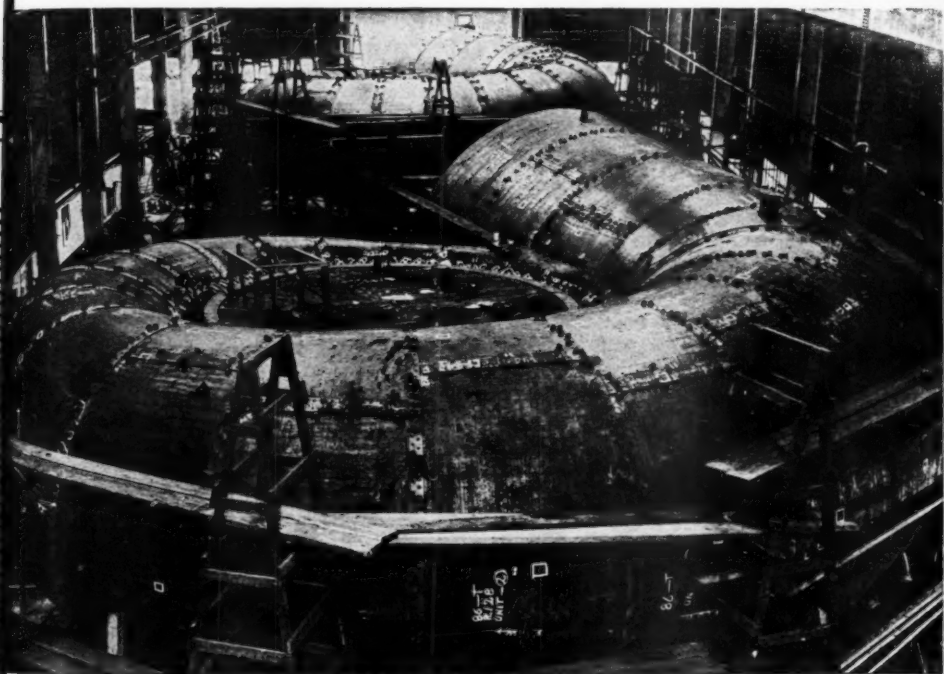
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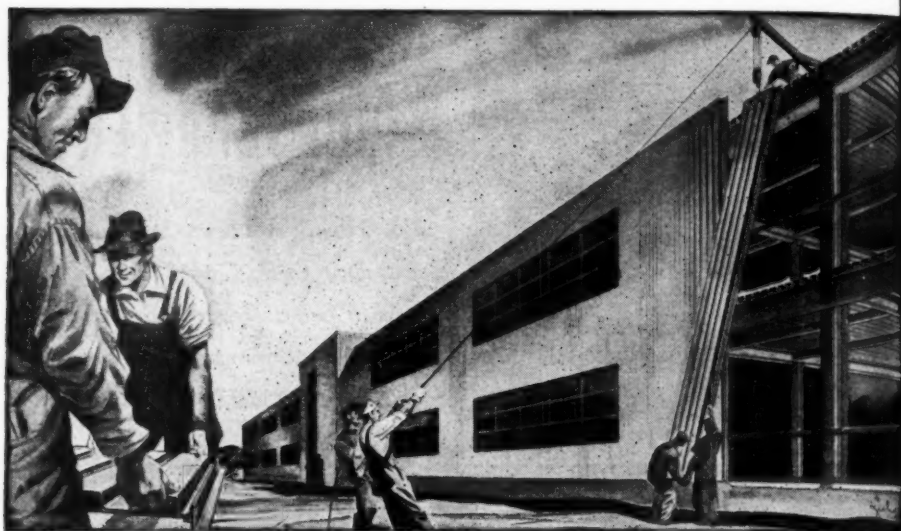
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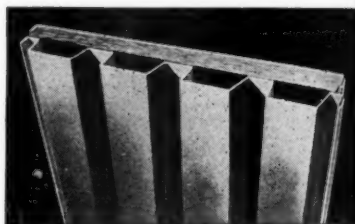
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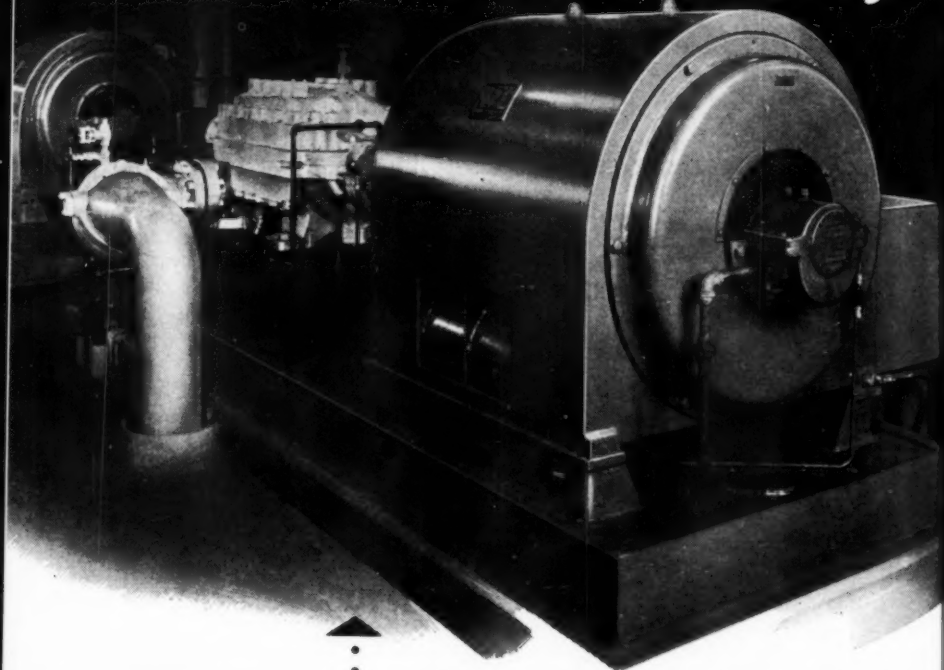
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# Utilities Almanack



DECEMBER



18	T <sup>A</sup>	† Edison Electric Institute, Industrial Relations Committee, begins meeting, New York, N. Y., 1952.
19	F	† Institute of Radio Engineers-American Institute of Electrical Engineers will hold joint high frequency measurements conference, Washington, D. C., Jan. 14-16, 1953.
20	S <sup>a</sup>	† Canadian Electric Association, Engineering Division, Eastern Zone, will hold meeting, Halifax, Nova Scotia, Canada, Jan. 15, 16, 1953.
21	S	† National Association of Home Builders of the United States will begin meeting, Chicago, Ill., Jan. 18-22, 1953.
22	M	† Pipe Line Contractors Association will hold annual convention and exhibition, Houston, Tex., Jan. 19-21, 1953.
23	T <sup>u</sup>	† American Institute of Electrical Engineers will hold winter general meeting, New York, N. Y., Jan. 19-23, 1953. 
24	W	† New England Gas Association, Operating Division, will hold meeting, Boston, Mass., Jan. 20, 1953.
25	T <sup>A</sup>	† Merry Christmas, 1952!
26	F	† Canadian Electrical Association, Sales Division, will hold meeting, Niagara Falls, Ontario, Canada, Jan. 22, 23, 1953.
27	S <sup>a</sup>	† Compressed Gas Association will hold annual convention, New York, N. Y., Jan. 26, 27, 1953.
28	S	† American Society of Heating and Ventilating Engineers will hold meeting, Chicago, Ill., Jan. 26-29, 1953.
29	M	† National Rural Electric Co-operative Association will hold annual meeting, San Francisco, Cal., Jan. 26-29, 1953.
30	T <sup>u</sup>	† American Gas Association will hold home service workshop, Dallas, Tex., Feb. 2-4, 1953.
31	W	† National Association of Corrosion Engineers will hold short course in corrosion, Berkeley, Cal., Feb. 2-6, 1953. 





*Courtesy, Boston Edison Company*

### **An Icon of Public Service**

*Artistic photographic study of power turbine assembly.*

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# Public Utilities

## *FORTNIGHTLY*

VOL. L, No. 13



December 18, 1952

## The Electric Light and Power Industry Looking Ahead

This article is a compilation of a number of cogent points made by the author in a recent series of statements on the future of the electric industry.

By BAYARD L. ENGLAND\*

PRESIDENT, EDISON ELECTRIC INSTITUTE

**B**ESET by frustrations in a search for peace, security, and the good life, our public figures, newspaper writers, and commentators keep harking back to the past terrible wars and horrors of the great depression. We cannot live backward, we can only use the past as a guide and teacher for preparation for the future. All that has gone before, especially the past twenty years, is too frequently depicted as radical or reactionary, vi-

cious or beneficial, broad in concept and execution, or narrow and restrictive of liberty, depending upon the political and economic preconceptions and orientation of speaker and listener.

We of the electric industry, by the very nature of the essential service we provide, are closely akin to those first trail blazers and road builders who started America off on the right track. Since the beginning of our industry seventy years ago, we have always been at the forefront, hard at work on

\*For additional personal note, see "Pages with the Editors."

## PUBLIC UTILITIES FORTNIGHTLY

the road of farm, home, and industrial progress which America is traveling.

In this advance position, we can see the obstacles to be overcome, the opportunities ahead, and the direction the road should take for the benefit of all the American travelers. And we have come to the full realization that there are those who are not so much interested in building this road as they are in blocking it, and wrecking what has already been done.

These demolition experts have been trying for twenty years to shove the electric companies aside. They have not succeeded yet, and we cannot allow them to succeed in the future. We know, and there are clear indications that others are learning, that as the electric companies go, so will go free enterprise—either forward to new achievements, or over the edge into eventual nationalization.

**N**OWHERE is this drive more plainly embodied than in the Interior Department's program, which has been clearly outlined on numerous occasions by high officials. On every side, we see evidences of the heavy campaign being conducted for Federal generating plants and Federal transmission lines. If the Interior Department succeeds in carrying out its plans, Socialism must eventually result—not just for the electric industry, but for other industries as well.

What is required from electric company leaders is genuine industrial statesmanship, which can see, without blinking, the full consequences of completion of the government power program, and which can work, forcefully and effectively, to prevent the eclipse of the investor-owned electric industry

and, what is far worse, the following inevitable plunge of the American people into socialistic darkness.

Incidentally, an outstanding exposition of Federal power schemes, their aims, and effects is contained in the paper presented this year by Jack Corette, president of The Montana Power Company. Mr. Corette also makes some sound suggestions as to how the electric companies can circumvent government power's destructive intentions and assure the bright future which we know is possible in this nation. (This paper, under the title "Have the Private Power Companies Any Future?" was published in the July 31, 1952, issue of PUBLIC UTILITIES FORTNIGHTLY.)

**W**E have heard so much of the growth of Socialism, the repressive hand of big government, and the futile efforts of our industry to advance the aims of private enterprise that a stranger to our land might expect to hear the dying gasps of independent business. The record does not support these views. Ours is an independent business and it is not in its death throes. Out of \$4,965,000,000 of revenues received in 1951, we paid \$610,000,000 in Federal income taxes alone, and in fact our customers paid us a total of \$1,150,000,000 for taxes which we handed over to local, state, and Federal governments. Only a strong private business could act as government's tax collector to that extent.

We must look forward but with eyes and minds trained in the past. Our language, customs, traditions, mathematics, and science, as well as our moral and ethical viewpoints, have

## THE ELECTRIC LIGHT AND POWER INDUSTRY LOOKING AHEAD

deep roots in the past. These we must recognize and use to build our lives in the future, welcoming change and testing each new idea, rejecting or accepting it in terms of our experience as a free people.

I note from records of the past that in 1925 our engineers and managers provided 21,472,000 kilowatts of name-plate capacity to meet 14,150,000 kilowatts of noncoincident loads. This corresponds to spare and reserve capacity of 52 per cent. Due to the great depression, this percentage rose to 89 per cent in 1932. Yet advancements in the art, tight managerial control, and co-operative activity between systems, a top quality of service with less than 12 per cent reserve and spare capacity was achieved in the years since 1945. This is solid achievement, even though we may wish for a little greater margin for greater operating comfort.

**T**HERE is no foreseeable limit to the market for electricity, and its importance to every phase of the nation's life continues to increase, and the record shows phenomenal growth in use. The output of electric power in the United States doubled in the decade from 1931 to 1941 and doubled again in the decade from 1941 to 1951, with the long-range trend of growth from 1920 to 1951 being 7.1

per cent compounded. In the past decade it has been 8.6 per cent compounded. Power system load forecasters are using a long-range trend which averages for the country as a whole from 5 to 6½ per cent per annum compounded. At a compound rate, all these percentages contemplate in fifteen or twenty-five years ahead huge increases in the sale of electricity.

As a matter of fact, the resulting figures are so large that government agencies have used them to say that the job is too big for private capital alone. In proportion, however, the anticipated increases are no greater than the industry has dealt with for decades, and viewed from the standpoint of the supply of power and the supply of electrical consuming equipment, appliances, and devices, the industry and the manufacturers of equipment were never better prepared to develop and supply adequately these potential market additions.

**T**HE electric companies are doing a record-breaking job in constructing power facilities needed for making the American highway to the future. At the end of World War II, the electric utility companies had an investment in plant and equipment of about \$14.5 billion, after sixty-three years of epoch-making progress. In



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## PUBLIC UTILITIES FORTNIGHTLY

seven short years since 1945, the electric companies have nearly equaled that figure in new construction, with expenditures of about \$11½ billion, and are now engaged in expansion plans that will raise the total since the war to \$18 billion by the end of 1954.

Our expansion program embodies a host of financial, technical, and organizational accomplishments which are not only concrete in themselves but point towards even greater achievement to come. However, there is a factor which cannot be blueprinted, financed, or put through an electronic business machine and on which all else depends—the electric companies' spirit of service.

Today, the American who sees himself increasingly dependent on electric power is increasingly appreciative of that spirit. We who render electric service have a responsibility of awesome proportions which grows automatically as more electric power is utilized in more ways. With this expanding responsibility must go an ever-greater sense of service, to inspire our own activities and to keep the public good will and backing essential to progress.

### *First Glance into the Future*

**T**HE President's Materials Policy Commission in June of this year suggested that in twenty-five years we may expect the demand for electric energy to increase two and one-half times as a result of the predicted doubling of the nation's industrial output. In 1951 there were 434 billion kilowatt hours developed by all plant regardless of ownership or use for central station or noncentral station purposes. The 1975 forecast of pro-

duction by the commission is one trillion, 400 billion kilowatt hours. The analysis of the forecast of generation of 1,400 billion kilowatt hours indicates 311 billion kilowatt hours for residential service, 194 billion for commercial purposes, 677 billion for industry, and losses plus miscellaneous uses, 218 billion.

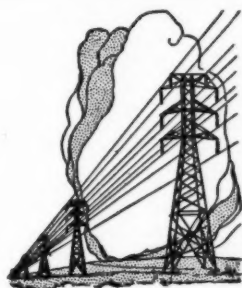
While this forecast presents a formidable challenge to the wisdom and managerial skill of our privately owned central station systems, we have no doubt that all demands for electricity in our service area will be met. The requirements for expansion to meet these predicted needs have been stated by the commission as follows:

*First*, every opportunity must be taken to harness undeveloped water-power potential at a rapid pace, wherever economically feasible. Since much of this development will have to be at Federal multipurpose sites, government surveys, planning, and authorization and appropriation procedures should be markedly hastened.

*Second*, full advantage should be taken of opportunities that exist to improve technical efficiencies and otherwise effect economies to hold down or reduce costs of electricity production, particularly in thermal generation plants.

*Third*, existing capacity and future installations should be geared into broadly designed, integrated operations covering wide regions. This approach holds a great promise for the most efficient use of sources of electric power.

**A**s to the second and third requirements, we are well ahead of the commission, since essentially they describe long-continuing practices of our electric companies.



### Keeping the Record Clear

**“T**HERE can be no doubt that the contrast between electric companies and government projects is a vivid one, and capable of making a strong impression on Americans who still believe in the rights and freedom of men. It is our duty to maintain that contrast between free enterprise at its best and government bureaucracy and to make sure that it is brought strongly to the attention of the people.”

We are also in agreement that opportunity must be taken to harness undeveloped water-power potential—wherever economically feasible. We cannot agree however as to the wisdom of “much of this development” under Federal auspices.

**T**HIS point brings up another challenge which we are fully capable of meeting through thoughtful action. I refer to the report of another of the President’s commissions, the one which issued “A Water Policy for the American People.” Again and again throughout that massive propaganda document it was held that the Federal government must of necessity be the leader in planning and developing the country’s hydraulic resources. What we must demonstrate by examples from the past and concrete plans for the future is that furnaces, boilers,

turbines, generators—hydro as well as thermal—switchgear, relays, integrating procedures, incremental loading schedules, and mass organizing techniques were not invented, developed, or brought to commercial and industrial fruition by government, but by our citizens working outside of it.

By way of illustration, who effected the reduction in the coal rate from 7 to 10 pounds per kilowatt hour to 1.14 pounds? Who designed and made possible the great interconnections of systems with the pooling of capacity? (The Pennsylvania-New Jersey interconnection is a perfect example, as is the 24-state power pool extending from the Gulf to the Great Lakes where the 1951 peak load of 25,000,000 kilowatts was twice that of Great Britain.) Who pioneered in the development of the increase in voltage in transmission networks with the



## PUBLIC UTILITIES FORTNIGHTLY

ultra rapid reclosure breakers so that when a circuit is interrupted, the breaker recloses before the load on the circuit has a chance to find out it is without power? Was it government, or was it the untold thousands of scientists, engineers, chemists, metallurgists, and technicians working in private industry?

**T**HE basic consideration in our plans for the future relates to the number of people our country will have and their manner of living. A backward look will help to forecast the future. In 1930 we had a population of about 123,000,000, in 1940 about 132,000,000, by 1950 there were 151,000,000, and by 1975 we may expect 190,000,000. In 1940 we had about 25,000,000 residential or domestic consumers alone, or one consumer for every five persons. By 1950 this ratio had changed to one for every four. Supposing that by 1975 we had one consumer out of every three people, our plans for outside plant alone would have to contemplate 63,000,000 customers.

What kind of homes will these customers present to the privately owned electric power industry for service? By 1975 the home may have a connected load of 50 kilowatts and a demand of 10 kilowatts. It may consume 25,000 kilowatt hours per year. It will have fully equipped electric kitchens of revolutionary design and appearance. It will be heated and cooled according to requirements by the heat pump and, in some instances, heated by radiant space-heating units. It will have complete light conditioning and permanently installed sun lamps. It will have numerous color

television units and remotely controlled wiring for sound and intercommunicating systems. It will have an all-electric laundry, probably fully automatic in design and streamlined in appearance. This latter feature may come about through the development of revolutionary new textiles requiring different laundering methods. The window forms, furniture designs, construction materials, and space shapes will probably bear very little resemblance to the homes of 1951 and 1952.

**H**ow much of this prediction comes true and becomes widespread depends to a large part upon our continuing to render a high quality of service, which must be based on equitable, economically sound, promotional rate schedules. Advantageous financing must be sought and applied to construction of facilities in the next twenty-five years and it will rest heavily upon these two considerations.

Utility company annual reports to come in 1955, 1965, and 1975 now become more important than those for 1951 and 1952. What will be our operating budgets, our construction budgets, our capital requirements? What can we expect of advancements in the arts with respect to accelerating obsolescence or effecting new economies? What should our depreciation policies be? These are but a few of the pressing questions which government cannot answer but which we as a great economic force must answer.

*We do not seek nor need government subsidies. We also do not want unfair competition on the industrial and business level from our government. We favor sound and competent regulation, both Federal and state.*



## THE ELECTRIC LIGHT AND POWER INDUSTRY LOOKING AHEAD

This helps to keep our wits sharp and our public satisfied as to the reasonableness of our prices and our suppliers of funds with which to build confidence that rate regulation is sound and not punitive.

Government at all levels can help in the conservation of materials and man power by promoting an atmosphere in which strong independent utility systems can co-ordinate their construction programs and pool their generating resources to take advantages of time differences, differences in shapes of load curves, and all the other factors which make integration economical in the technological sense.

AREA development, a wide field which is swiftly increasing in importance, is attracting growing electric company interest. It is easy to understand why this should be. Unlike manufacturing plants or other enterprises, an electric company cannot pull up stakes and move out of a locality if conditions are not to its liking. With its service extended into every phase of community life, an electric company which helps to promote the prosperity of its community will gain both tangible financial benefits and customer and public good will — an intangible whose presence or lack often produces very tangible effects.

Emphasis in area development has

thus far been primarily on industrial and agricultural improvement, in cooperation with other interested local groups and organizations.

Through concerted community effort, with the local electric company taking a leading part, new manufacturing plants have been established, new methods, and more profits, have been brought to existing industry and to the farmstead. But the vast possibilities of area development activities have barely been tapped. Here is a challenge worthy of the best men in the industry, and one which holds great potential rewards.

In the technical field, too, there remains a great deal to be done as we advance on the long road ahead. Engineers and technical people are, and always will be, engaged in a multitude of carefully planned and organized approaches to improvement, refinement, and development, and in the constant pushing away of roadblocks to greater efficiency and economy of operation in the electric systems of the nation.

THE engineers who are moving forward in the atomic-electronic age have opportunities for original contribution which could very well dumfound those who have come before. And never have scientists, engineers, and technical people been held



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## PUBLIC UTILITIES FORTNIGHTLY

in such high universal esteem as they are now—a tribute both to what they have accomplished in the past and to their ability to bring about even greater wonders in the future.

It has always been true, in the development of American industry, that technical advances and enterprising salesmanship have gone together. The salesman takes the result of technical ingenuity to the people, and, frequently, must overcome mistrust and inertia in demonstrating how the innovation may be of service. His success opens markets and brings home revenue which encourages and makes possible further technical progress for the benefit of the public. But without the creative activity by which the technical man improves and develops products and services, the salesman would be helpless—with nothing to sell.

In the complex corporate structures of today, there is frequently a tendency to lose sight of the vital linkage between these two functions, which in themselves seem so widely different. But the very difference between the two poles of engineering initiative and inventiveness and commercial enterprise provides the stimulating current which makes possible the progress now accepted by Americans as a hallmark of their way of life.

**S**ELLING continues to be a most important phase of electric industry achievement. To insure the sound growth of revenues required, to make the most of adjusted rate structures, today's salesman must, in his load-building activities, exercise skill and understanding to a degree that would amaze his pioneering predecessors. He must make sure that the expensive

equipment which provides the service he sells, works to its best revenue-producing capacity so that revenues will keep pace with the expansion of productive facilities. In turn, a good revenue record makes it easier to call forth financial resources needed for plant expansion.

It is clear that the interaction of highly specialized talents of many kinds is required in developing tomorrow's electric industry. And, in dealing with many problems which are common to all electric companies, there has been increasing co-operation among organizations and individuals which has been most encouraging and productive.

This co-operation is clearly evident in the functions of the Edison Electric Institute's committees. To be frank, until I took over the president's post, which seems to be a highly mobile one, I had no idea of the extent and value of the contributions of the some fifty working groups in the EEI committee organization.

Every significant area of electric operation is covered. Well over one thousand experts in their chosen fields from electric companies throughout the nation serve as committee members. In a sense, they are the industry's scouts, moving ahead of the main advance, reporting on possibilities, offering suggestions as to the best way to handle an accounting problem, a safety campaign, a financing question—considerations of every kind, large or small, which conceivably could affect a company or the industry in its service to the public.

**I**N view of the intensity and diversity of the industry's effort in behalf



### Business Must Look before It Leaps

**"FREE enterprise leadership has always had to demonstrate its capability to carry out desirable aims, before successfully enlisting the support of the people. On the other hand, political leadership, once in office, has the impersonal force of government behind its decisions, whether they are right or wrong. The stronger the hold of government over groups and individuals, the less necessity is there for the dominant political leader to consider the best interests of his countrymen."**

---

of the public electricity supply, we may occasionally feel that we are not appreciated by the people as we should be. Naturally, most people haven't the time or the inclination to know as much about our business as we do—they have their own problems. If the fullest practical measure of public understanding is to be gained, we must present our case patiently and continually, making sure that what we say and what we do are consistent, and filling in the broad outlines of our story with the facts needed to carry conviction.

Americans have always had to be shown—our almost instinctive refusal to take anything at face value is one of our democracy's greatest safeguards. We of the electric industry can bear this out. For twenty years now, we have been under heavy attack by the advocates of government power, yet there are reassuring indi-

cations that their sound and fury are falling on increasingly unconvinced ears.

**Y**OU may remember the big government project dedication at the beginning of July, which produced much publicity concerning unfavorable remarks made there about the electric companies. Shortly after, a telephone call was received at institute headquarters from a man who identified himself as a union member in the postal service. He said he and some co-workers had looked up Bureau of Labor Statistics figures comparing the cost of living with the cost of electricity, and were astounded by what they found, especially in view of what had been said at the dam dedication. He wanted to know if we knew about these figures, because he thought they were most important to the electric companies' case.

## PUBLIC UTILITIES FORTNIGHTLY

He had discovered that the cost of living index had climbed from an average of 99.4 in 1939 to 185.6 in 1951—nearly doubling in twelve years—but the index for household electricity had actually declined in the same period from 96.2 to 91.2.

As we know, electric service represents less than one per cent of the family budget, and over all the cost of living is continuing to show its record-breaking abilities.

Other facts and figures are available to Federal power advocates, but they show little desire to bring them before the people. Americans should not have to dig after the data which are developed by tax-supported agencies—the facts should be made widely available whether they hurt pet governmental schemes or not.

ONE constant Federal power claim is that competition from Federal projects forces the electric companies to keep their rates down. These government power promoters are holding back the truth from the American people to further the cause of socialized electricity. The incontrovertible facts, borne out by the statistics available in every Washington office dealing with electric power, are these:

The largest decreases in electricity prices came long before Federal projects were more than planners' dreams.

From 1882 to 1913, the average price per residential kilowatt hour came down from 25 cents to 8.7 cents—a decrease of more than 16 cents, back when a penny would buy a penny's worth.

Further advances in technology and operation made it possible to get the average price down to 5.6 cents per

kilowatt hour by 1932, a decrease of a little over 3 cents in the nineteen years preceding the New Deal-Fair Deal era.

In the following nineteen years, the price of a kilowatt hour of household electricity declined to an average for 1951 of 2.81 cents—a decrease smaller than the decline shown in the nineteen years prior to 1932.

The invasion of the Federal government in the power field during this period did not accelerate the long-established downtrend in electricity rates. In fact, government fiscal policies made it difficult to keep the price trend down at all. Inflation has caused costs of electricity generation to skyrocket and taxation has become an increasingly heavy burden.

TAXES are another subject on which the truth should be told. Taxes are the electric companies' largest item of expense, amounting in 1951 to over \$1 billion. Of every dollar in revenue coming in, about 23 cents were turned over to the Federal and local governments as taxes. If the companies were as free from taxes as Federal projects are, they could afford to cut their household electricity prices in half.

On the tax score, the British have set our government power advocates an example which they have not been inclined to follow. Not only is Britain's nationalized power a system liable to taxation, it must also pay interest on its capital investment and on the new money it raises. In addition, the British Electricity Authority is required to charge sufficiently high rates to cover all expenses incurred by the system as a whole. It is clear that

## THE ELECTRIC LIGHT AND POWER INDUSTRY LOOKING AHEAD

there is no real magic in government power which sets it above economic law. In this country, the pulling of taxes from the people for government power has become more obvious and the taxes more painful.

When our Federal power projects finally are forced to assume their financial and tax responsibility, the preference clause in favor of local governmental power systems and co-operatives will lose its advantage. Without the subsidy, most government power will be more expensive than power produced by the companies.

THERE are indications that the people and their representatives in Congress may soon bring the day when Federal power operations will be taxed and will have to pay their full costs. Under the tax burdens imposed by huge Federal expenditures, more and more Americans are reluctant to see these privileged government enterprises escape from sharing the load.

In addition to this consideration, other signs are appearing which give strong hope that the tide of federalized power may rise no higher, unless there is a fundamental upheaval affecting equally all of America's economic, political, and social institutions. This seems most unlikely now that there

are positive indications of increasing public disillusionment with left-wing theory and practice.

In a few years, much of the potential water power of the streams in most parts of the country will have been developed by private as well as governmental agencies. This will largely remove flood control, irrigation, and navigation as excuses for huge government appropriations for power projects. Without these constitutional disguises, government power advocates will have to campaign for steam power plants to further their goal of federalized power, and, with the issue between government power and free enterprise electric service thus openly drawn, the electric companies should find definite advantage on their side.

I am greatly encouraged as to the soundness of the electric companies' position now and in the future by the recent acts of Congress, which show antipathy to the practice of building duplicating transmission and steam-generating facilities, and by the congressional insistence upon contracts to use existing facilities to avoid this wasteful and destructive practice.

IT has become apparent that the people living in many localities, through their elected officers, have grown more critical of the bureau-



**Q** "TAXES are the electric companies' largest item of expense, amounting in 1951 to over \$1 billion. Of every dollar in revenue coming in, about 23 cents were turned over to the Federal and local governments as taxes. If the companies were as free from taxes as Federal projects are, they could afford to cut their household electricity prices in half."

## PUBLIC UTILITIES FORTNIGHTLY

cratic attitude and procedures of the agents of the Federal government. The natural and more lasting advantages of the free enterprise system over a Socialism have become clearer to them, even above the allurements of the pork barrel.

As an over-all measure of how relations between the companies and the Federal agencies have been progressing, I should like to point out that investor-owned companies produced 93 per cent of the power output in America in 1937. This dropped to 81½ per cent in 1944, and in 1951 it was the same. For the past eight years it has held about steady. When the large plants under construction on the Columbia and the Missouri are operating, this percentage may dip for a time, but it should turn back again as the supply of power from other sources catches up again.

We of the electric companies have an essential faith in our industry, and it has motivated vigorous responses to the threat of government power. We have also seen that this faith is part and parcel of a strong loyalty to America's free institutions, which encourages the growth and development in the public service of an industry like ours. We are no longer a single voice crying in the wilderness of bright and poisonous economic and political theories into which the nation has been, perhaps unwittingly, led in the last two decades. There are strong indications that the people wish to seek a better way to the future.

I think an important factor in this shift has been the increasingly clear difference between electric companies and government power projects. Our

faith in ourselves is also a faith in the American people, because, after all, our customers, our stockholders, our employees, *are* America. But government power promoters have faith only in government planning, which only they can represent—hence, their ambition is to take away individual responsibility and substitute government control.

By performing power supply duties efficiently and considerably, by acting as good citizens in our communities, the nation's electric companies bring into focus the senseless and destructive motivations of government power, so that the people can see—and act. The ruthless bureaucratic selfishness involved in government projects is being demonstrated now as it has never been before—at Niagara Falls, on the Roanoke river, in Hell's Canyon, and in other places in the nation—and we must make sure that the people have full realization of the significance of what is being attempted.

Because we have been subjected so long to unfair competition, we may not realize completely how well we stand in comparison to the government invaders, and we may not have made this relative position plain enough to the public. Here is a 10-point comparison, which summarizes in a general way the characteristics and motives of electric companies and government power projects. Applied to the industry or to individual electric companies with supporting facts, such a summary could have an eye-opening impact on many people, and show clearly with whom their welfare and future lie:





### The Growth of Electric Service

**"T**HE basic consideration in our plans for the future relates to the number of people our country will have and their manner of living. A backward look will help to forecast the future. In 1930 we had a population of about 123,000,000, in 1940 about 132,000,000, by 1950 there were 151,000,000, and by 1975 we may expect 190,000,000. In 1940 we had about 25,000,000 residential or domestic consumers alone, or one consumer for every five persons. By 1950 this ratio had changed to one for every four."

**F**IRST, electric operating companies are distinctly local units, responsive to community needs and active in community improvement. In contrast, governmental power projects are responsible to centralized bureaucratic authority, and local communities have small voice in their affairs.

**Second**, electric company trusteeship of electricity supply in the public interest is carefully watched over by duly constituted local, state, and Federal regulatory commissions and agencies.

But government power agencies are not subject to regulatory authority, and make their own rules.

**Third**, electric companies provide millions of dollars annually in taxes to support government, while, instead of providing tax support, government projects draw on the tax money of the nation to subsidize their activities.

**Fourth**, electric companies operate in the best tradition of the American enterprise system, an integral part of our heritage of freedom. But, government projects, if spread throughout the land as advocated by their supporters, would place the economic and social life of whole regions in the control of small groups of politically appointed administrators — gravely endangering American democracy.

**Fifth**, electric companies direct their energies to the improvement of electric service and the promotion of its use for the benefit of all their customers, increasing the ease with which they may develop — in business or otherwise — as free people. On the other hand, Federal government projects which produce power and engage in other activities are able to exert a dominant influence over the people dependent upon them, and seriously



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restrict free development whenever it suits the agency bureaucrats.

**SIXTH**, electric companies pass on the benefits of increased operating efficiencies to the public in the form of lower rates, in keeping with the economics of the business. But governmental projects set rates at politically pleasing levels and make up power costs with the aid of allocations to other activities and by drawing money from the public treasury.

*Seventh*, electric companies are owned by millions of stockholders in every walk of life and thereby contribute to the financial security of millions of Americans. But the nation's taxpayers finance governmental projects, whether they want to or not, and they have no direct vote or voice in how much of their money shall be spent or how it will be used.

*Eighth*, electric companies have an excellent management-labor record, offering fair wages, job security, and other benefits, thereby attracting the above-average personnel needed to assure fine electric service. But politics enters into any government activity, power project or otherwise, often prompting selection of unqualified, but politically acceptable, personnel, and encouraging inefficient, even corrupt, operation.

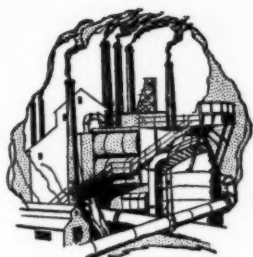
*Ninth*, electric companies must earn enough on their investment to attract and hold the support of investors, who, besides being owners of the business, are electric customers as well. To succeed in this, the electric companies emphasize efficiency, cour-

tesy, and initiative in their operation, so that the public will be pleased with its service. On the other hand, government enterprise does not have to pay its way, so waste, inefficiency, and stagnation are fostered, along with a careless and indifferent attitude towards the people served, who have no recourse beyond the government agency itself.

*Tenth*, the electric companies' record of past achievement shows they have never faltered in living up to their responsibilities; and their plans for the future indicate even greater accomplishment in the years ahead. But the record of government-dominated enterprises shows that they have contributed practically nothing to the technical advance of the electric industry; that most advocates of government in the power business are moved by political and ideological considerations; and that in the future they hope to dominate the entire electric industry and with it the economic and social life of the country.

**T**HOSE are the ten points of the electric industry, showing what Americans must choose between.

There can be no doubt that the contrast between electric companies and government projects is a vivid one, and capable of making a strong impression on Americans who still believe in the rights and freedom of men. It is our duty to maintain that contrast between free enterprise at its best and government bureaucracy and to make sure that it is brought strongly to the attention of the people.



# Automatic Adjustment Clauses In Gas Rate Schedules

## PART II

*Recently, OPS handed down its long-awaited order curbing the operation of escalator clauses in natural gas contracts, to the extent that they would increase collateral rates (not directly under such contracts) above production price ceilings. The result of this controversial regulation has been to focus new attention on escalator clauses in natural gas supply contracts and rate schedules.*

By EDWIN FLEISCHMANN\*

WHERE service has recently been changed to natural gas, few escalator clauses appear in the rates. It seems hardly probable that this is due to refusal of a regulatory commission to permit their inclusion. Rather, one might suppose that the utilities chose not to have escalation because they considered their purchase contracts to be quite firm as to price; or because they felt that escalation of natural gas might be objectionable from the point of view of the customer; or perhaps they wished to get away from the billing complexities which are sometimes incident to it.

If a cost-of-gas escalator is to be adopted, there are several complica-

tions inherent in the proper application to the various classes of customers of the increases or decreases resulting therefrom:

(a) Many pipeline rates and some contracts for emergency and other firm gas contain demand charge provisions, or requirements for the maintenance of a fixed or minimum load factor. Under the usual procedure, both the demand charge and the commodity charge are included in an average increment or decrement which is applied to all of the blocks of all of the rates. This is manifestly improper, since the changes in the demand element should relate only to those blocks of the rates in which the demand component is normally recouped. The commodity portion of

\*For personal note, see "Pages with the Editors," December 4, 1952, issue.

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the increase or decrease may properly be applied to all MCF sold.

(b) Some of the present escalators in use endeavor to pass on to the ultimate customers additional taxes imposed on the pipeline company and charged by it to the distributing utility. These charges also have a definite demand aspect and should be so apportioned in the rate adjustments.

(c) In the case of interruptible schedules which are not entitled to firm service during peak time, the rates ordinarily include only a small portion of the demand component, since the system is primarily built to carry the winter peak. It is, therefore, improper to assign to these customers the same proportion of the increase of the demand charge increment as is apportioned to the firm gas users.

(d) Where the pipeline company's proposed rates go into effect under bond pending final determination by the Federal Power Commission, there will be difficulty in readjusting the rates to the finally prescribed level and making the necessary refunds, if any. If the charges have been carefully apportioned to the classes of customers, however, the problem will probably be no more complicated than it would be in the absence of an escalator. The state commission would doubtless have the problem of determining the proper distribution of the refund.

(e) Cost-of-gas adjustments can, of course, be made as frequently as necessary. The seasonal variations in the use and cost of the gas supplied may dictate that quarterly adjustments based on 12-month moving total of costs constitute a practical period for reviewing the cost increments.

(f) Finally, if cost-of-gas escalation is used, it is important that it be applied to all sales, rather than just to large industrial or commercial uses, as has been the case in the past. Of the 21 utilities shown in Table III (Part I, December 4th issue, page 830) to have cost-of-gas escalation, 13 of them apply the escalation to all of their rates. It is unfair to ask the industrial customers to pay the added cost of gas for all of the sales, even if all of the added cost is in the nature of a commodity cost and related only to the quantity of gas consumed. Such a practice would be even more discriminatory if the change in purchase cost is in part a demand component, for which the responsibility of the interruptible customers is limited.

THE foregoing implies that, for proper application of cost-of-gas escalator increments or decrements to the various classes of service and to the blocks of rates, there must be a thorough knowledge of the impact of the costs of operation on the various classes of customers. This may take the form of an occasional or even a continuous cost-of-service analysis based upon data which are usually available or can be obtained from the records of most gas utilities. Until recently, there has been some reluctance to attack this problem, but cost-of-service studies have been presented in a number of rate cases.<sup>1</sup>

<sup>1</sup>Speaking of such studies, the California Public Utilities Commission has said: "These cost-of-service studies are very helpful to the commission and have been carefully considered in the establishment of the rates herein." *Re Southern California Gas Co.* 50 Cal PUC 143, at page 165; 87 PUR NS 492. See also *Re Coast Counties Gas & E. Co.* 50 Cal PUC 781, at page 786.

## AUTOMATIC ADJUSTMENT CLAUSES IN GAS RATE SCHEDULES

### 1. The Price of Competitive Fuel

COMPETITIVE fuel-price escalation introduces into the regulatory process, rate making almost exclusively on the basis of value of the service, or what the traffic will bear.

In manufactured gas utilities, the use of an escalator based on the price of competitive fuel has usually been confined to rates for house heating, where the effect of the escalator was to limit the growth of the load as fuel oil or coal prices rose, and to hold the gas load for the utility as they went down. The numbers of them in effect in the various states now, and over the past few years are shown in Table I below, for which data were taken from the same source as was used in the preceding tables. There has been a trend away from this type of escalation.

When natural gas was first introduced and fuel oil was cheap, utilities were permitted to sell interruptible oil-well gas, which would otherwise be

wasted, in competition with fuel oil, in order to realize something above their out-of-pocket expenses. It was assumed that the gas system would thus be better off and the firm customers would benefit. When fuel oil prices began to rise during and after the war, it became apparent that earnings resulting from competitive fuel escalation were very high. In California, which was one of the first states where large volumes of interruptible natural gas were available, this type of escalation, now almost entirely confined to interruptible rates,<sup>2</sup> is still in effect. One irrigation pumping schedule of Tucson Gas & Electric Company in Arizona is presently the only other natural gas rate containing a competitive fuel price escalator. Table II (page 901) shows the decline

<sup>2</sup> The firm industrial rates, and certain blocks of the general service tariffs of Southern Counties Gas Company of California, are at present the only firm gas rates in the state which are subject to change with the posted price of fuel oil.



TABLE I  
NUMBER OF DISTRIBUTING UTILITIES SERVING MANUFACTURED, MIXED, OR LP-GAS HAVING COMPETITIVE FUEL-PRICE ESCALATOR CLAUSES IN RATE SCHEDULES

	Data Given in AGA Rate Committee Report for:			AGA Rate Book-Latest Revisions to 9/15/52
	1949	1950	1951	
Illinois .....		1		
Massachusetts .....	6	3	3	3
Michigan .....	1	1	1	1
New York .....	1	1	1	
Rhode Island .....	3	3	2	1
Wisconsin .....	4	4	4	3
Total .....	14	12	10	8
Total Number of Utilities Supplying Manufactured, Mixed, or LP-gas .....	388	372	341	286
Percentage of Total Number with Competitive Fuel-price Escalation .....	3.61%	3.23%	2.93%	2.80%

NOTE: Totals have been adjusted to eliminate duplicated figures resulting where one utility serves in more than one state.

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since 1949 in the use of these clauses throughout the country.

THE California commission, in recent cases, has limited escalation to interruptible industrial gas rates.<sup>3</sup> It has also narrowed greatly the range in the posted price of fuel oil over which the price of gas could be varied.<sup>4</sup> In addition, it adopted the principle that escalation may take place within the prescribed range of oil prices *only below* the rates which the commission found to be fair and reasonable.<sup>5</sup> The purpose of this ruling was to preserve for the company the original objective of competitive escalation, and thus to enable it to hold gas business which it might otherwise lose in a declining oil market. Suffice it to say that, from the point of view of cost, unless the natural gas distributors' purchase contracts contain an identical escalator keyed to the price of competitive fuel, the competitive fuel-price rate adjustment clause will, sooner or later, yield distorted results.

<sup>3</sup> *Re Pacific Gas & Electric Co.* 49 Cal PUC 107 at page 125, 82 PUR NS 473. In *Re Coast Counties Gas & Electric Co.* 50 Cal PUC 781 the prescribed rates contain an escalator clause only in the interruptible and resale schedules. Theretofore, firm industrial and large general service consumption had been escalated in both companies.

<sup>4</sup> 49 Cal PUC 107 at page 124; 50 Cal PUC 781.

<sup>5</sup> *Re Southern California Gas Co.* 50 Cal PUC 143 at pages 166-168; 87 PUR NS 492. The commission summarized its findings on page 170 thus: "The rates established in these schedules are considered reasonable as basic rates in view of all the testimony in the proceeding. If, however, the price of oil should decline from its present level, the applicant should have the right to meet the competitive price. To this end, escalation between stated limits below the basic rates established herein is provided in the schedules."

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### 2. U. S. Department of Labor Wholesale Commodity Price Index

ONE of the earliest efforts to relate gas prices to the costs of doing business as reflected in the price indices of commodities is the one adopted a number of years ago by Florida Power & Light Company. The theory behind the clause is that a utility uses many types of material in its operation; when these commodities increase in price, the cost of doing business goes up for the utility as well. The clause has been quite successful in the Florida territory, although its use has not spread very widely to other utilities elsewhere. The Mississippi Power & Light Company had a similar clause in its tariffs in Clinton, Mississippi, prior to the transfer of its gas properties to Mississippi Valley Gas Company January 1, 1952. The present utility has this provision in only one of its schedules, and plans to eliminate it as occasion permits.

It is possible that considerable distortion of the correlation between rates and costs of service may result from the application of increments or decrements derived from the movement of a commodity index on a flat MCF basis, since there is no necessarily close connection between the costs of the commodities and the costs of making manufactured gas. No such clause is used by any natural gas company.

### 3. All Operating and Maintenance Expenses

THE most comprehensive adjustment clause is the automatic rate

# AUTOMATIC ADJUSTMENT CLAUSES IN GAS RATE SCHEDULES



TABLE II  
NUMBER OF NATURAL GAS DISTRIBUTING UTILITIES  
HAVING COMPETITIVE FUEL-PRICE ESCALATOR  
CLAUSES IN RATE SCHEDULES

	<i>Data Given in AGA Rate Committee Report for:</i>			<i>AGA Rate Book-Latest Revisions to 9/15/52</i>
	1949	1950	1951	
Arizona .....	2	2	2	1
California .....	6	5	5	6
Louisiana .....	1			
Michigan .....	1			
West Virginia .....	1	1		
Total .....	11	8	7	7
Total Number of Natural Gas Utilities .....	525	540	589	640
Percentage of Total Number with Competitive Fuel-price Escalators .....	2.10%	1.48%	1.19%	1.09%

adjustment plan such as that which was in effect in the territory of Southern Counties Gas Company of California from 1946 to 1949.<sup>6</sup> The plan provided for quarterly adjustment of the company's rates in accordance with a formula which took into account all operating expenses, including taxes, depreciation, and rate of return, as well as a rate base computed in accordance with the formula.

The Southern Counties plan was not continued after it had served its purpose, and there seems to be a

general disinclination to revive plans of this character. The so-called Washington plan has been amended until its original outline is but dimly visible. The New Jersey Power & Light Company rate adjustment plan for its electric rates was abandoned by the company in 1951.

The only such comprehensive adjustment plan now in operation is that in effect under an agreement between Cincinnati Gas & Electric Company and the city of Cincinnati. A somewhat similar plan has been made effective May 15, 1952, by Toledo Edison Company in Defiance, Ohio. Both of these companies are included in Table III (December 4th issue), since escalation with all costs includes cost-of-gas escalation.

<sup>6</sup> This plan was prescribed by the California Railroad Commission in its Decision No. 38786, 46 CRC 384. It terminated in accordance with its terms on November 15, 1949, when the company's rates again reached the level from which they had been reduced by the plan in 1946. Decision No. 43865, 49 Cal PUC 454.



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### Conclusions

COST of natural gas escalator clauses and tax clauses appear to be the only types of automatic rate adjustment provisions the number of which has been increasing among gas utilities during the past few years. Both types involve escalation of rates with changes in costs which comprise very substantial percentages of all operating costs.<sup>7</sup>

If the use of rate adjustment clauses has not been more widespread, the reason must probably be sought from management itself. In a discussion of automatic adjustment clauses in all types of utility rates, E. Irvine Rudd, formerly chief engineer of the public utilities commission of Connecticut, which has done a great deal to bring fuel clauses in that state's utilities into harmony,<sup>8</sup> put it this way: "... no regulatory authority on its own motion has promulgated a fuel clause. Furthermore, utility

managements may be expected to present their considered judgments that each utility should be allowed to decide upon its own fuel clause, even to the extent of having not only different clauses in different classifications but different bases for different rates in the same classification."<sup>9</sup>

A fuel clause for a manufactured gas utility may properly provide that the adjustment be applied uniformly to all blocks of all rates. Cost-of-gas escalators in natural gas schedules, however, should not be applied across the board to all MCF sold, but should be separately spread to the classes of service depending upon the impact and the size of the demand and commodity portions of the change in price. The use of this type of escalation should be restricted, if it develops that there is a material effect on bargaining with unregulated producers. Where there is both field and pipeline supply, however, the price set by the regulatory body for the pipeline may have the necessary limiting competitive effect on the field supply.

<sup>7</sup> Purchased gas accounted for 49.96 per cent and taxes for 14.66 per cent of total operating revenue deductions of all classes A and B natural gas companies in the twelve months ended May 31, 1952. Data from Federal Power Commission Release No. 6176-G-2694.

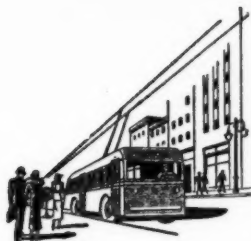
<sup>8</sup> *Re Uniform Fuel Clauses for Electric Utilities* (1945) 57 PUR NS 250; *Re Connecticut Light & Power Co.* Docket No. 8168, January 28, 1949.

<sup>9</sup> "The Fuel Clause in Schedules of Electric and Gas Utilities," presented to the twenty-first annual Conference of State Utility Commission Engineers at Chicago, Illinois, June 16 and 17, 1943. Reprinted in *American Gas Journal*, September, 1943, page 14.

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CORRECTION TO TABULATION IN PART I: *The first part of Mr. Fleischmann's article, which appeared in the December 4th issue of PUBLIC UTILITIES FORTNIGHTLY, gives (on page 828) the following totals of the number of utilities in all states supplying manufactured, mixed, or LP-gas under fuel cost escalator clauses: 121 for 1949; 139 for 1950; 128 for 1951; 93 for 1952 (partial). Although these are correct totals for the state-by-state data given in the table, they do not make allowance for duplication where the utility serves in more than one state. Adjusted totals to eliminate such duplicate figures are as follows: 116 for 1949; 132 for 1950; 122 for 1951; 90 for 1952 (partial).*





## Is Urban Transportation in Danger of Collapse?

Here is a thoughtful analysis of the problems of transit, other than its financial problems, and will be of interest to all utility industries and regulators.

By HENRY E. JORDAN\*

**S**HOULD a new war come upon us, and the sources of fuel or rubber are cut off or greatly reduced by action of an enemy, or are curtailed by the government for conservation and diversion to war use, the cities of the West coast may well become a liability to the war effort rather than the extraordinary asset they have been in the past and should be in the future.

The ever-increasing use of the automobile and truck in this rapidly growing area has resulted in an accelerated decentralization, and the cities and towns have spread in a relatively loose and disconnected manner, leaving much vacant space in both industrial and commercial centers, as well as in residential sections.

The automobile is almost a necessity to the daily life of a large percentage of the residents of this area, and both the automobile and the truck are an

absolute necessity to a very large percentage of the commercial and industrial operations as there is no other available transportation suitable or adequate for their use. It follows that the sudden elimination or drastic curtailment of the use of the automobile and truck might literally paralyze the whole area.

**S**OME twenty-five to thirty years ago, the major portion of all business and residential sections of all sizable cities was served by urban and/or interurban rail lines. However, the increased use of the automobile, bus, and truck has resulted in the abandonment of many miles of this rail service. In Los Angeles and the adjacent area, approximately 600 single track miles of local and interurban electric rail lines have been abandoned, even though the population has doubled several times during this period. New areas have been and are continuing to

\*For personal note, see "Pages with the Editors."

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be developed at ever-increasing distances from the original core of the cities. These conditions have resulted in the increased use of the automotive type of vehicle and the public's dependence upon it and added to the traffic problem throughout the area and especially in the downtown districts.

It is an obvious and well-known fact that all American cities are facing an ever-increasing traffic problem. Large sums of money have been and will continue to be spent for the widening of streets, traffic control, new highways and superhighways, to cope with the problem. However, these efforts have resulted in stimulating the use of the motor vehicle, and the problem remains unsolved.

It is not debatable that the traffic problem has continued to increase in complexity, with the end not yet in sight. If not the largest, it is certainly one of the largest economic problems of our western area. A solution must be obtained before the increasing strangulation becomes disastrous.

**P**ERHAPS OUR economic structure can continue to support the present upward trend of an expanding program of more and better thoroughfares and an increasing number of motor vehicles for an indefinite period. However, there yet remain unanswered some other very important questions, and those who have assumed the responsibility for the present and future development of the western cities should immediately consider them. The time is already very late.

Let us examine some of these questions and offer some brief and reasonable answers, which must be faced:

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**1.** Is the value of "man time" (man-hours) sufficiently great to force a more condensed occupation of areas within the cities at some future date?

*Answer:* The trend of modern civilization has resulted in increasing the value of man-hours and commodity utility, and it is inevitable that this trend must be met by increased efforts to conserve them. Decentralization of commerce and population is a trend in the opposite direction, as it forces the consumption of the required time and fuel or power to traverse the added distances involved. The economic waste that results from decentralization cannot be indefinitely carried forward on an ever-increasing program without jeopardizing the position of the area in competitive production.

**2.** WILL the desire of the people to live in individual homes surrounded by grounds and open space be sufficiently great to overcome the desirableness of the inherent efficiency that may be effected in commercial and social intercourse from a more condensed mode of housing?

*Answer:* It appears possible, and even probable, that air conditioning, television, improved lighting and heating, and other similar inventions of the future will soon tend to retard the trend of decentralization of housing and business centers. It is certain that pleasure driving of the automobile has been retarded, if not eliminated, due to excessive traffic congestion and increased accident hazards. The novelty of such driving has worn off. It is conceivable that the above-mentioned inventions with the improved arts in housing, will have their effects in a

## IS URBAN TRANSPORTATION IN DANGER OF COLLAPSE?

somewhat similar manner; that is, the extraordinary appeal of the individual home with the lawns and grounds will diminish.

3. WHAT would be the density of the population of the areas with which we are concerned, if all vacant property was filled according to a pattern of the present existing occupied structures?

*Answer:* If the answers to preceding questions are sound, it follows that the occupation of vacant areas will be accelerated in the future, with the resulting increase in density of population per square mile, increase in property values, and increasing demand for short-haul transportation.

4. WILL the pattern of structural density remain at the present level, or will the vertical space be used on an increasing trend, resulting in the increased density of population and commerce in the area?

*Answer:* If the answer to the preceding question is sound, it follows there will be an ever-increasing trend to occupy the vertical spaces, thus further resulting in increased density of population per square mile.

5. As the vacant land and ground spaces diminish, will increasing demand force prices upward?

*Answer:* It is certain that the law of

supply and demand will inevitably force land prices upward and in turn will force increased use of vertical space, and that in turn will increase the density of population per square mile.

6. How much increase will there be in atmospheric contamination from increased use of the combustible type of prime movers (engines) that are presently used in the automotive type of conveyances?

*Answer:* One of the objectives of superhighways in metropolitan areas is to furnish arteries for funneling into densely occupied areas an increased number of automobiles, busses, and trucks. This results in increasing the contamination of the atmosphere of the areas through which they pass.

7. WILL human health be jeopardized by this increased contamination of the atmosphere by the exhausts from combustible engines in vehicle operation, or will human beings develop immunization that will sufficiently protect them from this contamination, or will scientific developments keep pace with or exceed the increase in contamination and effect methods to offset it?

*Answer:* To our knowledge, there is yet no clear and positive answer to this question. However, it is certain that unless the answer is in the affirmative,



**Q** "SOME twenty-five to thirty years ago, the major portion of all business and residential sections of all sizable cities was served by urban and/or interurban rail lines. However, the increased use of the automobile, bus, and truck has resulted in the abandonment of many miles of this rail service."

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the health standard of individuals living in these areas will inevitably deteriorate.

**8.** Is it conceivable that a congested area like New York, with its many-storied buildings, could be adequately served with transportation by single unit, self-propelled vehicles?

*Answer:* It is quite evident that it could not with its present surface thoroughfares. It is further evident that any plan to provide adequate thoroughfares in that city for such transportation would be so tremendous in cost that the local public could not stand the expense.

**9.** Is it conceivable that trends toward conservation of man-hours, increasing land values and the improvement of housing, and implements of recreation and entertainment will result in condensing population in our western cities, so that they may in the future approach or surpass that of the city of New York?

*Answer:* This goal has been set and it has been frequently claimed that sometime in the not too distant future the cities of the West will be the largest in the world.

**10.** WILL the ever-increasing use of petroleum type of fuel in automotive equipment and other types of transportation and the increasing use of petroleum products in other applications diminish the supply so that increasing costs or governmental regulation will limit its use for transportation?

*Answer:* It is doubtful that an accurate forecast can be made of this, as

there are too many unknown elements, including the ever-increasing development of uses of petroleum products resulting from inventions and discoveries and the expansion of those uses already at hand. New discoveries of petroleum deposits may postpone, indefinitely, limitations that might otherwise be caused by lack of supply, as may the development of some new and economically proved type of fuel. However, these are uncertainties.

Controls limiting the use of petroleum products and rubber were placed in effect during the late World War and seriously affected both public and private transportation. It is true that controls also limited the use of certain materials, such as metals, lumber, and other important products. However, unlike the products from metals and wood, transportation service is ever a current and critical part of our mode of civilization, and any interruption of its availability severely affects both the health and economics of the area where such interruption occurs. An extensive period of nonavailability of transportation in any modern metropolitan area would result in a major catastrophe to human health and welfare.

**11.** Is it proper to invest such a tremendous amount (\$500,000,000 to \$1 billion) in freeway rights of way and structures of a design and character that will be suitable only for self-propelled vehicles without first having answered the foregoing questions?

*Answer:* It would be an unpardonable crime to saddle the present public and future generations with this tremendous financial burden without first



### Replanning Traffic Arteries

**"I**t is imperative that the freeways be built with properly designed and adequate facilities for use of mass public transportation. If it is decided that rail facilities are not desirable, then surface loading areas for busses and trolley coaches should be provided with proper 'pull-off' lanes from the main lanes of travel, thus allowing minimum delay in the loading operation and maximum schedule speeds by these public transportation vehicles."

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having made an exhaustive study in an attempt to not only determine the best obtainable answers to these questions, but also to determine whether or not another type of transportation may possibly be better, or might readily be substituted for the individual automotive type of unit in the event future conditions and circumstances limit or eliminate their use.

**T**HE impetus of the freeway plans is far too great to consider whether or not it is desirable to retard it; however, it is not too late to recognize the urgency of supplementing the present plans so that they may better serve the public and the areas which they directly affect.

It is imperative that the freeways be built with properly designed and adequate facilities for use of mass public transportation. If it is decided that

rail facilities are not desirable, then surface loading areas for busses and trolley coaches should be provided with proper "pull-off" lanes from the main lanes of travel, thus allowing minimum delay in the loading operation and maximum schedule speeds by these public transportation vehicles.

In congested areas elevated ways could be constructed to permit these public transportation vehicles to operate at relatively high speeds without other vehicle or pedestrian interference.

It would be possible to construct these two-lane elevated ways on center supporting members that would occupy ten feet or less in width on the center line of the surface streets. The two lanes would permit both local and express operation.

This structure could be designed to give a pleasing appearance with curved

## PUBLIC UTILITIES FORTNIGHTLY

surfaces beneath and these surfaces could be illuminated with indirect lighting automatically controlled to insure a predetermined light intensity on the adjacent street at all times.

The elevated ways could be served with escalators or stairways at each loading point.

**S**UCH a plan would provide a type of mass transportation that would have both appeal and utility. It would attract many people who presently drive their automobiles into congested areas and park all day while they are at work or shopping. All this adds to traffic congestion and to delay to vehicles that are essential to the operation of these districts.

The plan would include or result in large low-cost parking areas being built adjacent to the freeways so that people could leave their automobiles and use the busses or trolley coaches

into the congested district, resulting in an over-all economy to the entire area. This would also guard against the inevitable disaster that will result if the utility of our freeways is greatly limited by the shutting off of gasoline and rubber supply for automobile use in the event of war.

Provision for the use of freeways by public transportation vehicles, as above outlined, would provide a means of handling increasing passenger travel as the density of population and commercial activity increases within the area.

**A**QUISITION of right of way and increasing construction cost, together with the impending threat of war, combine to emphasize the importance of immediate action being taken to develop and effect a plan for proper utilization of our freeways by public mass transportation.

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**“THE** march of the human mind is slow. People do not grasp these trends toward Socialism, which means state authority VERSUS constitutional authority. You cannot expect the people to defend themselves against what they do not understand. Their judgment is as good as their information.

“If we are to continue the system that built our country, the rights of our risk capital system depend upon the integrity of its proper interpretation by those administering our government, and the freedom of our institutions to produce. The ability of the system to function rests in Congress, which originates legislation, taxation, and appropriation of public funds.

“Good men in government need outspoken support from good men in business; together they constitute an overwhelming majority. They should cast aside all suspicion of one another and co-operate for the destiny of America. If we fail in this solution of our problems, then history may say that our way of life died at the height of its glory.

“Those citizens who have faith must become articulate and stop this trend toward a socialized America. Our only weapons are facts and truth. Our hope of preserving the blessings of liberty lies in making those blessings plain to the millions of Americans.”

—EDWARD F. HUTTON,  
writing in “The Freeman.”





## Natural Gas for the Pacific Northwest?

*Comparatively few people in this country realize that we now have more miles of natural gas pipeline (over 400,000) than railroad track (397,000) in the entire United States. Tremendous transportation system of pipelines takes most of the gas from the central sources of Texas, New Mexico, Arizona, Utah, Kansas, and other near-by states, where the main pools of gas exist, and carries it to every section of the United States, including California, leaving out only the Pacific Northwest. Here is an account of plans being debated for furnishing that area with gas as well.*

By JOHN M. BEMIS\*

**T**HERE'S always a new frontier, if we listen to the commencement addresses, but none of the commencement speakers bother to remind us that pioneering ain't what it used to be.

Time was when a venturesome fellow, or a group of them, could pool their cash, their ammunition, their brains, and their ambition to set themselves up in just about any kind of business where there was a need for the goods or services they aimed to supply. It's a different story today, as any utility executive can testify. Where the old-timers fought Indians, renegades, claim jumpers, competitors, and the forces of Nature herself, the

pioneers of today find their greatest obstacles in the red tape, regulation, and the razzle-dazzle of ritual which only an all-seeing bureaucracy can conceive.

Take natural gas, for instance, for an instance which has the Pacific Northwest in something of a dither, these days.

There's a real need, in the northwest states, for the economy and efficiency which reasonably priced natural gas can bring to an area of rapid industrial development. Agriculture needs the stuff, to fuel the food-processing plants which can bring greater diversification of crops and less dependence on distant markets. Mining needs a cheap fuel for its smelters and reduction plants. The aluminum industry

\*For personal note, see "Pages with the Editors."



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can use it, to replace other more costly fuels in its remelt furnaces. Small manufacturing plants, business houses, hotels, and apartments, and, finally, the home owners, would welcome a fuel which could compete with coal and oil.

**F**OR an example out of the testimony of a top figure in the lead-zinc industry, before the Idaho Public Utilities Commission, we have the statement by Stanley Easton, president of Bunker Hill & Sullivan, which turns out that "99.99 per cent" lead, reporting that the Bunker Hill layout at Kellogg, Idaho, consumed a half-million barrels of fuel oil and 1,200 cars of coal every month—and that an ample and reasonably priced supply of natural gas could save his company \$600,000 annually on fuel. Easton added that half the cost of every barrel of fuel oil used at the Bunker Hill plant consisted of freight charges, and that transportation was also an important factor in the delivered cost of coal. This factor of transportation costs cuts a less formidable figure in the Portland-Seattle-Vancouver, British Columbia, area, where the advantage of water haulage is apparent; but in the interior area, of which Spokane is the hub, freight rates are something to consider.

Food-processing mogul J. R. Simplot of Caldwell, Idaho, looked over the great areas to be brought into food production in the Columbia basin of Washington, and stated that he would build new processing plants in that area to handle the new crops, if and when a low-cost fuel such as natural gas became available. Utah-Idaho Sugar already is at work on a \$7,000,-

000 beet sugar plant at Moses Lake, and will be right on the main gas lines if present distribution plans are carried out. So will Amalgamated, which also plans to build in the Columbia basin.

**I**N the field of domestic usage, cooking food and heating homes, natural gas at anything like a competitive price can "bail out" local gas systems such as those of Spokane, Seattle, and Portland, where the cost of supplying manufactured or "bottled" gas is growing annually. Portland and Seattle make gas from oil. Oil's going up. Spokane gave up the ghost on manufacturing gas some time back, and is feeding liquefied propane into its domestic system. Cities Service, which owned Spokane Gas for many years, recently sold out its property, with a book valuation of more than a million dollars, to Pacific Northwest Pipeline Corporation, a Houston outfit which proposes to bring gas all the way from the "Four Corners" section of the Southwest. The price was \$300,000 "and debts." Spokane Gas has been in the red for years, and its present franchise carries a stinger—it is void unless it obtains natural gas by 1955. As with the larger centers, natural gas would be more than welcome, in the economic sense, by lesser but important areas — communities such as Bellingham, Wenatchee, Yakima, Walla Walla, and a lot of other towns. So much for markets; now for sources of supply, and the matter of getting it to the customers.

The northwest states, principally Washington, Idaho, and Oregon, have no natural gas. Montana has a little, in a diminishing Cutbank area.

Canada has plenty of natural gas,

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not only in northern and southern Alberta, but in northern British Columbia as well. But all that gas is far from any but limited local markets, and, under provincial conservation policies, the natural gas usually found in association with oil cannot be wasted—they cannot just blow it off to get it out of the way. When an oil driller hits gas, the lid goes on, unless he has a market for the gas. Canadians aren't stupid. They know that the earth itself is the best kind of a gas-holder, and they know it will keep, right in the ground, until markets are found and means of getting it to market.

**B**EST market prospect in western Canada is the rapidly developing industrial area in and around Vancouver, British Columbia. But Vancouver is nearly a thousand miles from the nearest fields—the Pincher Creek area of southern Alberta, and a good share of that 1,000 miles is mountainous, expensive construction country. The Peace River fields of northern Alberta and British Columbia are just about as distant, but the going would not be so tough. However, areas of western Canada not now served with natural gas could consume only a fraction of the amount which would be

needed to justify the construction of a pipeline system costing \$100,000,000 or more. So, Canada looks toward the northwest states for a market. Looks, but doesn't leap, for Canadians are cagey. They want to be certain, first, that they have enough gas for their own foreseeable needs, that they get a good price, and that pipeline routes go where they will do most good, for Canada.

**T**HAT attitude on the part of the Canadian authorities, principally those of the Province of Alberta, to dicker as long as they felt necessary to get the best deal possible, was evident during the many months of negotiation which preceded the award of even a limited export permit to Westcoast Transmission Company, Ltd. Those early negotiations saw a half-dozen or more firms jockeying for favorable position before the Alberta authorities, each presumably seeking the right formula of prices and route concessions which would win the nod. The competitors, in the negotiating stages, included the following, listed with their financial backers or affiliates:

Westcoast Transmission Company, Ltd., of Canada. Backed by Eastman, Dillon & Co. of New York, and Wood, Gundy & Company, Ltd., and Nes-



**Q** "BRITISH COLUMBIA, which has been rather calm, to date, in the natural gas controversy, played an ace last month when the word was passed that unless the Northwest accepts Peace River natural gas, via the pipeline for which Westcoast Transmission, Ltd., has been given a permit, the Northwest may NOT utilize Canadian portions of the Columbia river drainage to bolster the critically short northwest electric power supply."

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bitt, Thompson & Co., Ltd., both of Canada.

Alberta Natural Gas Company, a Canadian subsidiary of Northwest Natural Gas Corporation, a Delaware corporation, backed by Morgan Stanley & Co. of New York.

Prairie Transmission Lines, Ltd., of Canada. Backed by Kidder, Peabody & Co. of New York.

Trans-Northwest Gas, Inc., of Spokane, which aimed to take gas at the international line from any exporter, distributing it throughout Washington, northern Idaho, and possibly into Oregon. Trans-Northwest is a locally organized firm, with a directorate made up of important northwest industrialists and business and professional men.

**I**NTO the picture, before the negotiations came to a head, came also such firms as McColl-Frontenac Oil Company, Ltd., and Union Oil of California; Canadian Delhi Oil Company, Ltd., and Trans-Canada Pipelines, Ltd.; Prairie Pipe Lines, tied up with Prairie Transmission Lines, Ltd., aforementioned; Western Pipe Lines, Alberta Natural Gas Grid, Ltd., tied with Northwest Natural.

Going to bat in the dickering for export rights were a few big leaguers in the oil and gas business, principally A. Faison Dixon, of New York, president of Northwest Natural; and Frank M. McMahon of Calgary, president of Westcoast, regarded as Alberta's biggest independent oilman. Trans-Northwest was represented by its president, organizer, and moving spirit, Spokane attorney, Paul H. Graves.

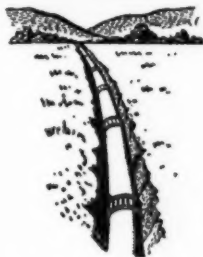
Northwest Natural offered the Ca-

nadians a choice of three main pipeline routes, with a couple of minor alternate routings, two of the main lines running mostly through Canadian territory (with the political advantage of most of the construction cash being spent in the Dominion), the third route looping down from the Pincher Creek area of southern Alberta to the Spokane zone, then across Washington to a north-south line junction near Everett, one branch running north to the Vancouver, British Columbia, district; the other branch heading south to Portland. The all-Canadian routes would have stub lines running south to serve important market areas in Washington, Idaho, and Oregon.

Westcoast, with its Canadian affiliate, planned a main line from the northern Alberta fields, angling southwesterly to the Vancouver, British Columbia, area, with branches running down into the northwest states. Westcoast later altered its routing to take in newly developing gas areas of the Peace River district of both Alberta and British Columbia.

**T**RANS-NORTHWEST, the Spokane outfit, maintained no ambitions to build lines in Canada. Instead, its aim was to accept gas at the international border, distributing it to communities throughout the Northwest through a pipeline net of its own. This firm also lowered its sights, in a dicker for gas supplies with Westcoast, yielding the coastal markets to Westcoast and retaining the inland field for itself. To handle that business it finds itself well set. Trans-Northwest, instead of starting at the top, the gas fields, figured that the bot-

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### FPC Reopens Canadian Gas Import Case

**L**ATEST development in the Pacific Northwest natural gas supply controversy (discussed in this article) was the recent announcement that the Federal Power Commission will resume hearings February 16th in Washington, D. C., on several proposals for the importation of natural gas from Canada to serve that area. These hearings were recessed last July. The FPC pointed out that Westcoast Transmission Company had recently received authority under the Pipelines Act of Canada to construct facilities across the international boundary.

tom was the place to begin, and so it sewed up pipeline franchises in 15 essential Washington counties, and added a statewide certificate from Idaho.

According to Trans-Northwest President Graves, the company's main objective was to see that the inland areas of Washington and Idaho were not left out in the cold when Canadian natural gas came across the line. That, of course, and setting up in what promised to be a satisfactorily profitable business. Graves' law firm earlier had served as counsel for Dixon's Northwest Natural Gas Company, in negotiations for the lease of an abandoned Great Northern railway tunnel deemed essential for the mountain-crossing section of Northwest Natural's route.

Graves points out, however, that he had withdrawn from Dixon's employ

long before he set up his own company, when it became apparent to him that Northwest Natural had abandoned plans to serve the Spokane area. This argument got into court when Northwest Natural got an injunction, later vacated, against interference by Trans-Northwest. Trans-Northwest responded with a superior court libel action.

**W**ITH that out of the way, all hands moved on to Washington, where the Federal Power Commission held hearings on proposals of five firms, including Westcoast, Northwest Natural, and Trans-Northwest, to import natural gas from Canada. Glacier Gas and Northern Natural Gas also got in on the act. Of the five, Westcoast alone had the prime requisite—an export permit from Canada; and Trans-Northwest alone had the requisite lo-

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cal and state pipeline franchises within the market area.

Intervening, as they had earlier in hearings before the Idaho Public Utilities Commission on Trans-Northwest's application for a statewide pipeline certificate, were railway and coal mining interests, whose concern, of course, was potential loss of revenue to the carriers and the mine operators and the miners themselves.

The commission, after extended hearings, took under advisement a motion by its own counsel to dismiss all applications! Later, the commission announced that hearings would be held in the Northwest before acting on the move by its own counsel.

What does it all add up to? Certainly not to any early relief for the Northwest's need for natural gas.

**B**RITISH COLUMBIA, which has been rather calm, to date, in the natural gas controversy, played an ace last month when the word was passed that unless the Northwest accepts Peace River natural gas, via the pipeline for which Westcoast Transmission, Ltd., has been given a permit, the Northwest may *not* utilize Canadian portions of the Columbia river drainage to bolster the critically short northwest electric power supply.

The "word" came November 17th from British Columbia Lands Minister Robert Sommers, when he told a public meeting at Oliver, British Columbia, that Americans won't get water rights on the province's Kootenai river system unless they agree to take Peace River natural gas.

Sommers' declaration, aimed directly, according to his own statement, at Seattle interests which he

says are fighting Westcoast's FPC application to bring gas into this area, has the effect of lining up the kilowatt-hungry Bonneville Power Administration and other members of the Northwest Power Pool behind the Westcoast project, because the proposed Libby, Montana, power dam, capable of pouring a heap of power into the pool, would push its backwater well across the Canadian line. There's also a more distant project of utilizing the Arrow Lakes in Canada as a storage pond, through a dam built within Canada, with Canada to be paid "rent" in the form of a share of the power it would help to create downstream.

Seattle interests are reported going along with the proposal of Ray Fish's Pacific Northwest Pipelines, to feed gas to the Northwest from the southwest states, principally the San Juan fields.

**N.** HENRY GELLERT, president of the Seattle Gas Company, in a series of broadcasts over Station KJR and KIRO (Seattle, Washington) in October stated his position as follows:

Certainly we cannot permit ourselves to be excluded from getting our share of the national heritage of natural gas. We want to dip into it before it is too late, for it is pretty well understood that only one more pipeline will be permitted to run out of the San Juan basin. If California gets it, the Pacific Northwest will never again have the chance to do so.

I am keen for the program I have outlined to you because the pipeline we project to come from the Four Corners' area will travel through other gas- and oil-producing states which give great promise of large gas reserves in the future. That's a very im-



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portant factor in the project. If we must spend \$100,000,000 more than we had first contemplated for the gas from Pincher Creek in Alberta, by being forced to take it from the Peace River area, I would much rather see that money spent in the purchase of American gas for the development of gas and oil production in the United States and not in Canada.

I am keen for our program because we would be subject only to American regulatory bodies, and that means, chiefly, to the Federal Power Commission. Our protection would come from being regulated by an American agency without any of the disadvantages of the status of foreigners before a Canadian board which could cut off our supply of gas or change our rates overnight. And Canadian laws are such that they could do it.

The greatest advantage of all, however, from tying in with the Four Corners' area in New Mexico would be that we remain a free market instead of becoming a captive market. For certainly the Alberta government, when it closed the central and southern resources of Alberta to us and made available only the gas in the northern part of Alberta, where the Alberta Natural Gas and Conservation Board, itself, said that there were only 500 billion cubic feet of gas available at the time, must have taken for granted that we were a market which had to take gas from Canada or be without it.

**P**ERHAPS the commission is waiting to see whether Pacific Northwest Pipelines, the "Fish" line, will go through with its notion of piping gas from the Four Corners' section of the Southwest "away up thar" to Washington, Oregon, and Idaho. Fish now speaks of a \$190,000,000 project which would include the \$120,000,000 pipeline, a \$15,000,000 gathering system, and a \$40,000,000 program of

drilling 600 gas wells in the next eight years.

Westcoast's deal with Trans-Northwest gives some tangible figures on which to figure what the Canadian gas would cost on this side of the line. The contract calls for a first year rate of 29.25 cents per MCF for firm service, at 70 per cent load factor; and 21 cents for interruptible service. Between the border and the burner, however, come distribution costs affected by factors of distance, load, and type of service, but they may not result in anything like an overloaded price schedule. One engineer, looking over the inland field of Washington and Idaho, estimated that natural gas would have to hit \$1.20 before it would become as expensive as fuel oil. Westcoast's border price of 21 cents on interruptible gas should figure out to a good deal for present quantity consumers of oil. They could keep their tanks filled with Bunker "O," against any break in gas service, converting with reasonable ease and little time loss from one fuel to the other. And, if no interruption came in the gas service, they could always find a market for their stored oil if that fuel was in short local supply.

**W**HAT's the attitude of the electric power industry toward natural gas? The power men do not seem too concerned, unless the British Columbia pronouncements already mentioned have altered their view. Their market far exceeds their generative capacity, and forecasts are that at least a half-million kilowatts of new generation will be needed annually to keep pace with the growing demand. They have an eye, too, on the possibility of using



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natural gas to fuel contemplated standby steam-generating plants, or for driving generators directly, on the system employed by Alcoa in Texas.

**S**UMMARIZING, we have (1) the Texas proposal to bring gas up into the Northwest sometime within eight years at perhaps as much as \$190,000,000 investment cost; (2) we have Westcoast's plan to bring the stuff down from the Peace River country, allegedly within two years, on an investment of \$111,000,000; (3) Trans-Northwest's \$22,000,000 distributing system cost would be offset by similar figures for the Texas outfit, so it remains \$111,000,000.

If Westcoast were to be granted the import permit it seeks, we would have this picture:

Westcoast, with a Canadian permit good for 42 billion feet of gas yearly from Alberta, can add to that total all the gas it can pick up in adjacent British Columbia—where new discoveries are frequent of late. McMahon, of Westcoast, is banking on British Columbia to supply what it takes to fill his 960-mile, 24-inch line to its 400,000,000-foot daily capacity. His line would start in the Dawson Creek-Peace River area, heading west to Fort McLeod, British Columbia, then southwesterly to a junction near Brodie, British Columbia. From there one branch would run over to the Vancouver, British Columbia, district via Hope and Chilliwack. Another branch would run southeast from the Brodie junction to a border crossing near Osoyoos, Washington. That is where Trans-Northwest would tie in. On the Vancouver leg a second border jump

would be made near Sumas, Washington, for a line southward into Oregon, serving Bellingham, Everett, Tacoma, Olympia, and Vancouver, Washington, on the road to Portland.

Not Seattle, though, for Seattle Gas, through its President Gellert, is not disposed to co-operate with Westcoast. So far as the inland country of Washington and Idaho is concerned, Seattle may be left out of the picture. There never has been too much of the old neighborly spirit here.

**N**O matter which way the coin flips, Trans-Northwest has some stake assured. Prepared with pipeline franchises in hand it could start laying pipe, if it chose. Franchises, in Washington, aren't exclusive, of course.

Trans-Northwest, contracting to buy gas from Westcoast but willing to buy from Texas if Texas gas comes through, has its plans for an 18-inch main distributing line heading south from Osoyoos to a junction near Ephrata, a large branch down to the Hanford-Pasco area with an extension west through the Yakima valley and one east through Walla Walla; the main line continuing east from Ephrata to Spokane. From Spokane a spur would head north to Trail, British Columbia, where Trans-Northwest would resell 10,000,000 feet daily to Westcoast, to serve the vast Cominco enterprises. East from Spokane another branch would pierce the Coeur d'Alene mining district, to serve the smelters at Kellogg and the various mining communities.

That's the picture at this writing. Confused, isn't it?

# Washington and the Utilities



## *Changing the Guard*

NEWSPAPER morgues suddenly came to life last month and did a land-office business when President-elect Eisenhower named all of his expected Cabinet officers. Most of those selected were pretty well known in their own rights. But even top-flight figures such as John Foster Dulles (State Department) and Charles E. Wilson (Defense) have a certain amount of lesser-known detailed background and minutiae which were immediately in demand as matters of public information.

For the public utilities, attention naturally focused on Eisenhower's designation of Governor Douglas McKay, of Oregon, to the Interior Department, and Ezra T. Benson, of Salt Lake City, to the Agriculture Department. McKay's selection to succeed Secretary of Interior Chapman was generally regarded as a "middle-of-the-road" appointment. True, he has been strongly in favor of reclamation and multipurpose projects. After all, no far western governor can hardly be otherwise these days. On the other hand, he has been outspoken in his opposition to valley authorities (*à la* TVA) and the domination of river basin development, under Federal dictatorship. McKay's philosophy in this respect might fairly be summed up in the following excerpt from his testimony before the House Committee on Public Works:

It is because of my firm belief in popular government that I am so vigorously opposed to placing the economic and political future of the state of Oregon and of the entire Pacific Northwest in the hands of an autocratic Federal corporation, such as

would be created by the proposed Columbia Valley Administration Bill. . . . It is a pattern of government by and through a huge Federal corporation which would be controlled and dominated by three men. And these three men, to obtain their appointment, must subscribe to the corporate philosophy of government which the CVA bill represents.

I am unalterably opposed to any such philosophy of government. I am a strong advocate of an aggressive and immediate continuance of the plan now well under way for Columbia valley development. It is practical, has already accomplished much for the area, and should not be delayed by the further consideration of any new or uncertain plan.

The question before us is not one of having a development program in the Pacific Northwest or not having it. The question is whether we want the development of the region to be carried forward within the successful pattern of representative government, or taken over by a new device of government which is dangerously similar to the devices of the totalitarian state. . . .

What, I ask, is there to stand in the way of our progress if we but have the mind to work together?

Why do we need a monopolistic Federal corporation imposed upon us, and upon our children?

What three men can take the place of the hundreds and thousands of free American citizens whose efforts have gone into the development that is here today?

What three men could run the state

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of Oregon for greater good, over the years, than a freely elected legislature?

To what three men could be safely entrusted the powers of Congress?

These, I think, are questions fundamental to the issue that is before you.

**M**CKAY, whose appointment was said to be a compromise between rival recommendations from two other Pacific Northwest states, is said to share the views of other western governors that the proper way to develop river basins and such incidental resources as hydro-electricity is by interstate compact or other agreements which will permit state, local, and private business participation. This was the line which President-elect Eisenhower took in his campaign speech on the subject in Boise, Idaho, on October 6th. It is the type of thinking which another western governor, Len Jordan, of Idaho, set forth in his recent article in *PUBLIC UTILITIES FORTNIGHTLY* (December 4th issue).

McKay thus emerges as a man who believes in local responsibilities, in people working together to get the right answers. McKay appears to be a free enterprise man. He respects the rights of people to have public distribution of power, if that is what they want, but he has equal respect for their right to choose to have service by tax-paying private ownership. He is for Federal development of resources, where this is necessary and proper, but there seems to be none of the zealot in his make-up and we can probably expect Interior to follow a middle-of-the-road policy under his administration. The main thing the utility industry has to do to get along with him is to keep the public interest as the top objective.

Reaction to McKay's appointment was generally favorable. It included praise from utility officials such as Thomas W. Delzell, chairman of the board, Portland General Electric Company. He added a significant note:

Ninety per cent of the troubles of private capital in respect to resource development can be cured by a change

in attitude, which simply encourages either local private capital or local public capital, as the people at the local level may prefer, to use their funds for resource development to enforce a maximum degree of local ownership and control.

**A**NOTHER electric utility officer in that area is John Dierdorff, vice president of the Pacific Power & Light Company. He and Gus Norwood of Vancouver, executive secretary of the Northwest Public Power Association, also lauded the McKay appointment, as did Clifford Erdahl, of Tacoma, executive secretary of the Northwest Power Pool, a strong municipal plant advocate.

The only sour notes seem to come from Oregon's political rebel, Senator Morse, and the state Democratic chairman, Howard Morgan. Morgan inferred that McKay would be sympathetic to exploitation of public resources by private interests and the "knifing of projects such as Hell's Canyon."

Ezra Benson, who will take over control of the rural electrification and rural telephone programs of the REA, is expected to be quite sympathetic with co-operatives as such. Aside from his background of close affiliation with the Mormon church, Benson's principal public activities have been in the field of farm co-operative promotion. He organized and became secretary of the Idaho Farm Co-operative Council in 1939. He was made executive secretary of the National Council of Farmers Co-operatives in Washington, D. C., which, incidentally, includes the National Rural Electric Co-operative Association among its membership.

But from his record as a firm believer in free enterprise and sound fiscal policies, utility men who know him are hopeful that he will not support wasteful duplication or competitive REA facilities, or the use of REA as a device for the expansion of Interior projects not endorsed by Congress. Benson was a strong Taft supporter and his selection was admitted by Taft to be one of his recommendations. This suggests that

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Taft's idea about REA legislation and REA policy, if any, will probably have considerable influence with Benson. Claude R. Wickard, REA Administrator, will be subordinate to Benson. Wickard still indicates that he expects to remain on his job after the administration changes, and perhaps until his statutory term expires in 1955.

### *Reclamation and the Budget*

EISENHOWER will probably take McKay's advice in filling such secondary posts as Reclamation Commissioner, now held by Michael W. Straus, Bonneville Power Administrator (BPA), now held by Paul J. Raver; heads of the Southeastern Power Administration (SEPA) and Southwestern Power Administration (SWPA). Rumors have been current for some time that the Reclamation Bureau is disposing of public property—that is to say, electric power—at a net rate that will not provide enough revenue to repay actual costs. So far, these rumors could be neither proved nor disproved, because the present administration has kept the books closed.

But one of the things which Eisenhower appointees are expected to do is to investigate all predecessor operations for purposes of checking irregularity, waste, inefficiency, etc. Reclamation Bureau has been working briskly to negotiate contracts to dispose of Central Valley project power in California. This might tend to make the proposed purchase of that project by the state (which the California legislature already has approved) less attractive.

The Truman administration may already be laying plans of strategic political opposition. The resignation of Price Stabilizer Tighe Woods and the possible dropping of price and wage controls by executive order are viewed in some quarters as maneuvers which will complicate things for the incoming Eisenhower administration. Of special interest to public utilities, however, will be the budget which President Truman will

send to the new Congress next January.

THE budget will include a number of projects which Congress has so far refused to endorse—Bonneville steam plants, the multibillion Klamath river diversion project, Hell's Canyon (Idaho), Kings river (California), the Central Arizona project, the Upper Colorado river project, and other costly proposals. The new Secretary may have to go on record regarding all these projects.

But whatever the new administration may think or do about Truman's budget, it will be Congress which will finally pass upon it. And here is where Representative John Taber (Republican, New York) will come to bat as the next chairman of the House Appropriations Committee. Taber may exemplify the nickname "Hardhearted John" when it comes to swinging the ax on the Truman budget. In fact, he already has started making up a sort of "executioner's list" of departments with appropriations which he considers inflated. Judging from their expenditures from July to November (fiscal 1953), Taber found out that the Atomic Energy Commission had been able to spend only about one-third of the amount Congress made available. He found that Agriculture Department was spending at the rate of less than half of its appropriation for the fiscal year 1953.

Agriculture has "tremendous appropriations for the REA and the Farmers Home Administration, according to Taber. Total available for both of these for fiscal 1953 was \$1,023,000,000—as compared with expenditures of \$143,000,000 for the first four months of fiscal 1953, or an annual expenditure for the entire year in the order of \$429,000,000. Taber said closer scrutiny must be kept on agricultural appropriations. Interior's Department of Reclamation, with \$345,000,000 available for fiscal 1953, has spent \$85,000,000 in the first four months, or at an annual rate of \$225,000,000. Taber said "it is apparent that these items have been treated altogether more liberally than there is any reason for and we ought to be able to get rid of some of the slack."



## Exchange Calls And Gossip

### *More REA Telephone Loans Approved*

THE Rural Electrification Administration approved \$1,481,000 for rural telephone loans during the week November 17th to 24th, to improve and expand rural telephone service in three states. The loan funds will enable the borrowers to provide modern telephone service to 1,885 subscribers in 13 counties. The completed systems will consist of 1,207 miles of line.

The Five Area Telephone Co-operative, Muleshoe, Texas, received a loan of \$938,000 to expand rural telephone service in six Texas counties. The newly formed co-operative plans to acquire 42 miles of line serving 57 rural subscribers from the General Telephone Company of the Southwest. The REA loan will enable it to construct 1,059 miles of new line and install new automatic dial central offices in seven towns.

Tri-County Telephone Membership Corporation, Belhaven, North Carolina, was allocated \$255,000 to construct 148 miles of line and install automatic dial facilities to serve 506 new rural subscribers. The area to be covered by this new system has had no previous telephone service. The completed system will have basic plant facilities to meet the needs of all potential subscribers in the operating area.

A supplemental loan of \$243,000 was granted the Oklahoma Automatic Telephone Company and will be used to cover increased construction costs since the first loan of \$409,000 was approved in April, 1951. An REA spokesman noted the increase in requests for supplemental loans received by the Federal agency and indicated new loans for rural telephone

service will be granted less frequently as a result of the necessity for retaining enough funds to cover anticipated secondary loans. The amount in lending authority granted REA last year has nearly all been allocated and it is not expected there will be many large new loans until the new Congress appropriates funds for the next fiscal year.

### *Michigan Bell Plans Expansion Program*

THE Michigan Bell Telephone Company has petitioned the state public service commission for authorization to issue \$75,000,000 in common stock to finance its expansion and service improvement program. If approved by the commission, the company's capital stock authorization would be increased from \$275,000,000 to \$350,000,000.

Clifton W. Phalen, Michigan Bell president, pointed out in the company's application that civilian demand for telephone service, together with military needs and with anticipated future service improvements, would require a continuation of the company's construction program "into the indefinite future." Phalen said the company expects to add about 80,000 telephones next year and about 70,000 annually from then on.

He said Michigan Bell has doubled its investment in telephone plants during the last seven years from \$250,000,000 to \$500,000,000 and that this construction program has made it possible to provide telephone service to 50,000 families in its territory since World War II. Since 1945, he said, dial service has been inaugurated in 50 exchanges with the



## EXCHANGE CALLS AND GOSSIP

result that now nearly 90 per cent of the company's telephones are dial operated. Rural service has also been greatly improved and expanded, he added, along with the inauguration of extended-area service which permits toll-free calling between adjacent communities.

### *Inflation Cited in Rate Boost Request*

HIGHER wages, taxes, and other inflationary effects due to the Korean war have forced the Chesapeake & Potomac Telephone Company to seek a 10 per cent increase in rates in Washington, D. C. Specifically, the company wants an increase in pay-station rates from a nickel to a dime and a down-the-line 10 per cent boost in charges to residential telephone users. The company calculated that these higher rates, with similar raises in business telephone service charges, would bring in \$3,500,000 more in gross revenues. Federal and District taxes would reduce the company's net from this amount to \$1,500,000, however.

The company's general counsel stressed the tax problem before the District of Columbia Public Utilities Commission. He pointed out that when the company got its last rate increase, effective in 1950, the Federal income tax rate was 38 per cent. Since that time the Federal tax has soared to 52 per cent. The company is now paying annual taxes of \$1,300,000. Two wage increases within two years have cost the company \$4,500,000. These and other operational cost increases have placed the company in an "inflationary squeeze" since telephone charges have remained fixed, the counsel declared.

C&P Vice President H. Holmes Vogel said there were 800 would-be subscribers waiting for any kind of telephone service and another 13,000 waiting for better grades of service. In prewar days the company had a margin in its facilities to accommodate new orders without waiting, but the war boom used this up. "Today there is no working margin in

most of our offices. When the applicant wants service, all too frequently he has to wait—the applicant doesn't like it and neither do we," Vogel said. To get back to reasonable margins, Vogel said it would take \$8,500,000 worth of plant investment and five years, although "this investment will not add a penny to the company's revenues and will, therefore, reduce the rate of earnings."

Vogel contended that prices have risen in general more than 87 per cent since prewar, while telephone rates have risen less than 20 per cent. While the PUC has allowed the company a 6 per cent rate of return, in 1948 the rate was 5.63; in 1949, 4.18; in 1950, 6.43; in 1951, 6.35; and in the three months ending last September 30th, 4.83.

### *Pacific T&T Seeks Rate Relief*

PACIFIC TELEPHONE & TELEGRAPH COMPANY has asked permission of the Washington Public Service Commission to raise its rates in the state by \$5,600,000 a year. The proposed increase would be the fifth since the war—and the largest. The company's vice president said telephone rates "have lagged far behind the general spiral" of inflation. He said the company has spent \$150,000,000 in the state since the war for service improvement and expansion, and plans to spend another million next year.

Requested increases vary by areas and classes of service, averaging about 2½ cents a day for the 650,000 telephones in the state. One-party business phones would go up from \$15 to \$17.50 a month. One-party residential phones in Seattle would be raised from \$6.50 to \$7.65 a month.

No long-distance rate changes are proposed.

The company said a rate increase was essential to enable it to recover the cost of recent wage increases and to provide the company with enough income to enable it to continue to finance, through the sale of securities, the millions of dollars of additional new construction required to improve and expand service to meet public demand.



## PUBLIC UTILITIES FORTNIGHTLY

### *General Telephone System Reaches Milestone*

ONE and one-half million telephones are now served by the General Telephone System. This milestone reached by the General Telephone System is a net gain of better than 100 per cent since December, 1945; at the close of World War II, the system had less than 700,000 telephones.

General Telephone System traces its history back to 1920 when there were about 1,544 telephones in service in five small Wisconsin communities. Fittingly enough, the one-millionth system telephone was installed at Richland Center, Wisconsin, in May, 1948.

At the end of 1935, the General Telephone System included 13 operating companies with a total of 380,000 telephones and one directory publishing company. Today these 14 subsidiary operating companies are serving 1,500,000 telephones; in addition to a greatly expanded directory company, a manufacturing subsidiary, the Leich Electric Company, has been added to the system.

General Telephone Company of Illinois, where the historic installation of the 1½ millionth telephone took place, is one of the major subsidiary operating companies within the General Telephone System. At present General Telephone Company of Illinois is furnishing service to more than 160,000 telephones in 222 exchanges, the largest of which are Kewanee, Lincoln, Macomb, Monmouth, and Carbondale.

The General Telephone System is the largest independent (non-Bell) telephone organization in the United States. Its 1,500,000 telephones are served from 1,065 exchanges in 19 states.

### *AT&T Long Lines Moves from New York*

LONG LINES DEPARTMENT of American Telephone and Telegraph Company has announced that headquarters for its eastern area will be transferred to White Plains, New York, on completion of construction of a major long-distance

switching center there early in 1954.

As a preliminary to construction of the building, Long Lines technicians late last month began erection of a 200-foot temporary tower to test transmission of microwave signals between White Plains and other points on Long Lines' radio-relay networks. Test signals will be beamed to Jackie Jones mountain about 20 miles north, and to a point near Plainview, Long Island, about 25 miles to the southeast. Jackie Jones mountain is the location of the first relay station out of New York on the New York-Boston relay system. Plainview will be the first station out of New York on a separate radio-relay route which will connect New York and Albany. Radio-relay systems are built primarily for long-distance telephone transmission and are capable, also, of transmitting network television programs from city to city. There are no plans at present, however, to route television programs through White Plains.

ENGINEERS estimate that the office space in the new center will be ready for occupancy in early 1954. The complex switching equipment is expected to be installed and in operation by the end of that year.

The automatic switching equipment initially will handle approximately 2,500 long-distance circuits and will relieve New York city facilities by handling most of the "switched-through" traffic to and from New England. Also, it will be the switching point for much of the long-distance telephone traffic that originates and terminates in the Westchester area.

The eastern area of Long Lines includes over 12,000 employees located in the New England states, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, West Virginia, and Washington. D. C. Long Lines' part in the Bell system is to build, operate, and maintain a nation-wide network of telephone facilities which interconnect the regional telephone companies such as the associated Bell Telephone companies and the hundreds of independently operated telephone companies.

# Financial News and Comment

By OWEN ELY



## *What Further Efficiencies Can Be Expected in Electric Utility Operations?*

**M**ANY utility analysts and investors are gravely concerned over the dangers of inflation, the possible inadequacy of depreciation reserves to provide for the ultimate replacement of property (based on a 50-cent or 25-cent dollar), etc.

To some extent these fears may be offset by the rapid progress made by engineers and administrators in the efficiency of constructing and operating utility plants. We say "may be" because in the past, in too many instances, the savings resulting from efficiency have all been diverted to residential consumers. (Average residential revenues per kilowatt hour were still in a downward trend as recently as August, 1952.) It is interesting, therefore, to get a detailed look

at the progress of efficiency and an appraisal of future possibilities.

Fischer S. Black, editor of the *Electrical World*, in a recent address before The Security Analysts Societies regional meeting in New York, emphasized the continuing trend toward greater efficiency, which he discussed under the twelve following headings:

1. Management viewpoint.
2. Corporate consolidations.
3. Physical interconnections.
4. Regulation and rates.
5. Effects of growth and system size.
6. Effects of size of equipment and facilities.
7. Obsolescence factors.
8. Fuel costs.
9. Use of new materials and methods.
10. Capital equipment and plant costs.
11. Operating and maintenance expense savings.
12. Utilization of labor.

**M**R. BLACK's discussion is summarized as follows: There are today some 500 private utilities, 2,500 municipalities and public utility districts, and 1,000 electric co-ops. A good many of these, especially the small municipals and co-ops, are uneconomically poor and there is no end to the possibilities for economical consolidation as conditions permit. However, these consolidations should come by

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## PUBLIC UTILITIES FORTNIGHTLY

way of negotiation rather than by governmental enforcement.

Regarding physical interconnections, most of these already have been made where substantial economies can be secured, but there is much still to be done in Ohio and New York, and in the southeast and the north-central areas, according to Mr. Black. The east and west Pennsylvania systems and the systems to the west of Ohio may also be interconnected. The Federal Power Commission favors a tie between the Columbia basin and California, to save an estimated half-million dollars a year. Savings from interconnections are proportional to the difference in energy and capacity costs between systems, and the distance between them.

With respect to regulation and rates, considerable progress has been made in revision of rate schedules to eliminate below-cost rates and inequalities among various classes of customers, and to obtain adequate return on increased consumer use. Applications for rate increases are now being made on the basis of forecasts rather than historical results.

The effects of growth and system size are reflected in long-range planning and the regular addition of more modern equipment. Improvement in the load factor permits greater use of existing equipment; a 1 per cent increase permits an increase in net income of about 4 per cent, it is estimated. In this connection the huge market for air conditioners and electric home heating is an important future factor. (Mr. Black perhaps had in mind that air conditioning will tend to balance the seasonal heating load, and improve the load factor.)

**T**HE use of bigger generators reduces the cost per kilowatt. Tripling the size of the unit in one case reduced the kilowatt cost by 25 per cent; and with large transformers the cost reduction has been even greater. Operating costs (chiefly labor) are also reduced by using big units. In the maintenance field, physical decay is being reduced and the normal life of much equipment is being

extended by technological improvements, greater use of preservatives, more frequent inspection, etc.

Fuel costs are of course a most important item, taking 17 per cent of the revenue dollar. The utilities are trying to combat rising fuel prices resulting from annual wage increases by providing greater flexibility in use of fuel, so that the cheapest fuel at any given time can be used. In the coal industry itself progress is being made with use of "continuous mining" machines, by research into pipeline transportation and underground gasification, etc. The use of fly ash for cement mixtures and in fertilizers may change this cost liability to an asset.

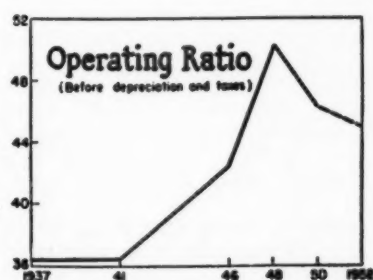
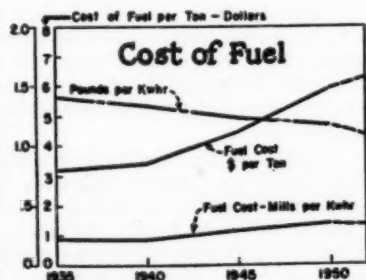
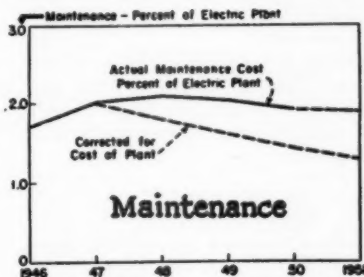
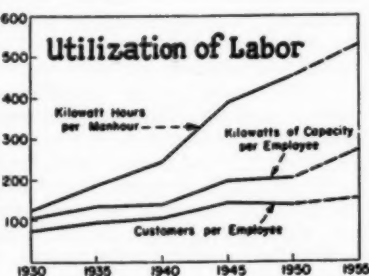
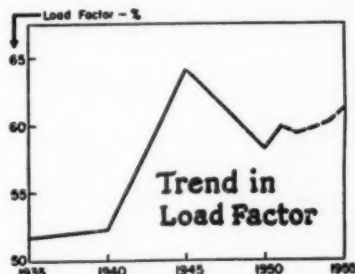
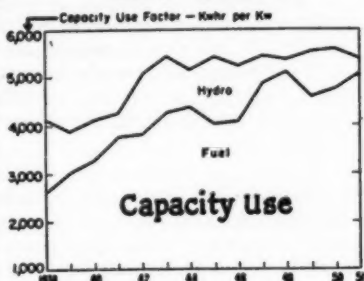
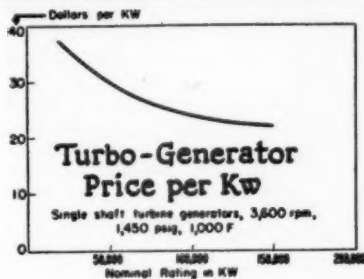
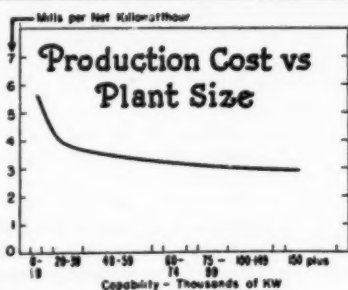
The construction cost index has gone up 80 per cent, but the average cost of generating equipment in the postwar period has only risen 29 per cent; economies developed and applied by the electric utilities represent the difference. New materials and methods are being used for construction. Aluminum conductors can save as much as 30 per cent over copper in certain portions of the system, and plastic insulators are also being developed. Machinery is taking over from hand labor in the construction field.

The increased cost of the system as a whole has risen only slightly in the past five years—from \$301 per kilowatt to \$314, or about 4 per cent. The gain in revenues per kilowatt hour has risen from \$78 to \$82 or about 5 per cent, thus equalizing the higher cost of facilities. Equipment is now being used 16 per cent more than in 1946.

**U**SE of man power drops rapidly with plant size; one-half a man per 1,000 kilowatts for large plants compares with over one man in smaller plants. While fuel prices doubled from 1937 to 1948, the cost per kilowatt hour generated went up only 83 per cent. Since the peak was reached in coal prices the cost of power generated has been declining, with a rapid decrease in the pounds of fuel burned per kilowatt hour—a 12 per cent improvement in four years.

In the utilization of labor, the indus-

## FACTORS IN ELECTRIC UTILITY EFFICIENCY



## PUBLIC UTILITIES FORTNIGHTLY

try has also made important strides through the use of accounting and other business machines, bimonthly meter reading and card billing, etc. In maintenance work labor is being reduced by the use of mechanized equipment and two-way radios, chemical brush clearing, etc. The over-all result obtained through better use of labor is indicated by the fact that kilowatt hours generated per man-hour are now four times as great as in 1930, with the trend continuing upward.

The cost of system maintenance as a per cent of electric plant in service is on the decline. During 1947 to 1951, maintenance dropped from 2.01 per cent of plant to 1.89 per cent. When a correction is applied for change in capital value of the plant, maintenance has dropped from 2.01 per cent to 1.30 per cent of electric plant.

Summarizing, Mr. Black concluded that the items of fuel cost, depreciation, and fixed charges have now stabilized. Operating and maintenance expenses are on the decline, the operating ratio having dropped from 50 per cent in 1948 to 45 per cent in 1952. The trend toward greater efficiency has "no foreseeable end," in his opinion.

Twenty-three charts were presented with the address, a few of them giving projected estimates through 1953-56; some of these have been regrouped and combined on page 925.

### *The Investor's Rôle in the Regulation of Public Utilities*

CHARLES O'NEIL of Duff and Phelps (the well-known Chicago utility consultants) recently gave an interesting and significant talk on the philosophy of regulation at the regional meeting of the Financial Analysts' Societies in New York, which may be summarized as follows:

Technically the function of regulation has been to protect the consumer from being gouged by high rates, and, on the other hand, to make sure that the utility's

property is not confiscated by rates that are too low. While the courts used to take a very active part in rate regulation, they have now delegated most of the fact finding to the commissions, placing a larger burden of proof on the utility to clarify and defend its need for adequate earnings.

Thus, in effect, it is not so much the rates themselves that are regulated as the net operating revenues, which are studied in relation to the arithmetic result of applying a fair "rate of return" to a fair "rate base." The rate base represents the value of the property devoted to public service, including necessary working capital and supplies in addition to physical plant; rate of return is supposed to represent the rate of earnings on other enterprises having corresponding risks, which compete with the utility for investment funds.

IN the past great emphasis was laid on determination of the rate base and this was debated for over fifty years by the commissions and courts. In the celebrated Supreme Court decision of 1898, *Smyth v. Ames*, a number of rate base factors were mentioned—original cost, cost of reproduction, par value and market value of outstanding securities, and earning capacity. This combination of factors became known as fair value and the decision "stood as the law of the land for upwards of forty years," according to Mr. O'Neil. However, in determining fair value, cost of reproduction came to be heavily stressed by the courts, and the preparation of statistical data on such cost proved a slow and cumbersome job, with different experts producing widely different results. The result was that rate litigation became long drawn out, and simpler methods were eventually favored.

Justice Brandeis in the Southwestern Bell Telephone Company Case in 1923 (PUR1923C 193) proposed "prudent investment," which was essentially an original cost theory—the word prudent was not clearly defined. However, this was a minority opinion and it was not

## FINANCIAL NEWS AND COMMENT

until the Natural Gas Pipeline Company Case in 1942 (42 PUR NS 129) that this concept was finally adopted by the Supreme Court. In effect, the majority stated that "the Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas." However, a separate concurring opinion was more definite, substituting prudent investment (*i.e.*, original cost) for fair value.

**W**HILE the rate base concept was thus being clarified, the question of rate of return was also being developed. Justice Brandeis in the Southwestern Bell Case had indicated that cost of service should include interest on capital, allowance for risk, "and enough more to attract capital." In the Natural Gas Pipeline Case the concurring opinion held that the rate of return should permit the company "to operate successfully and to attract capital."

About two years later another Supreme Court decision, in the Hope Natural Gas Company Case (51 PUR NS 193), gave "fair value" its final quietus, and characterized the rate-making process as "the balancing of the investor and the consumer interest." The court again affirmed that "the return to the equity owner should be commensurate with re-

turns on investments in other enterprises having corresponding risks . . . so as to maintain . . . credit and to attract capital."

After sketching the history of these Supreme Court dicta, Mr. O'Neil considered the rôle played by the consumer. Despite the fact that most utility service is monopolistic in character, the consumer still exercises considerable control over the utility regardless of regulation. "Consumers' interest in utility service breaks down into two elements: (1) price, and (2) quantity and quality of service. As to the price, they have a ready means of expressing themselves. If the price is attractive, they will buy more. If the price is too high, they will buy less.

"They have done the latter, for example, as to local mass transportation service, which is a regulated public utility. Thus there is available a natural consensus of consumer opinion as to the price element in that group's interest in public utilities. As to most kinds of utility service, the individual consumer's complete satisfaction with price levels long has been expressed by the strong and continuing demand for more service. As a result, utility service has come to be absolutely basic in every phase of the nation's social and economic structure.

### \*UTILITY NEW MONEY FINANCING (In Millions)

	November	Eleven Months	% Increase Over 1951
<i>Electric Utilities</i>			
Bonds .....	\$ 30	\$ 976	21%
Preferred .....	35	205	12
Common .....	28	412	26
	<hr/> \$ 93	<hr/> \$1,593	<hr/> 21%
<i>Gas Utilities</i>			
Bonds .....	\$ 32	\$ 464	D16%
Preferred .....	—	85	158
Common .....	18	94	15
	<hr/> \$ 50	<hr/> \$ 643	<hr/> D4%
Total .....	<hr/> \$143	<hr/> \$2,236	<hr/> 13%

\*As compiled by the Irving Trust Company, New York. D—Decrease.



## PUBLIC UTILITIES FORTNIGHTLY

"That structure could not have grown to its present proportions without adequate utility service. It cannot continue to grow without adequate increase in utility service."

**T**URNING to the investor viewpoint, Mr. O'Neil pointed out that while there have been important changes in other characteristics of utility companies, there is one that does not change—the territory and the customers. Thus the investor is widely interested in the attitude of consumers, and in the utility's public relations; he does not want rates to be so high as to limit use. Instead of the implied conflict between investor and consumer interests, there is considerable identity of interest. The consumer wants the utility business expanded, hence he must co-operate with the investor who supplies the capital for such expansion. Regulation is a party to the transaction, but the commissions and courts "cannot regulate the consumers in their need for utility capital to serve them, or the investors in their willingness to provide that capital."

Thus regulation to be effective must meet the *practical* requirements of both consumers and investors. "No longer is the question what will regulation accord to investors," Mr. O'Neil concludes, "now it is what investors require of regulation."

The public service commission of Wisconsin in the Wisconsin Electric Power Case (93 PUR NS 97), decided April 25, 1952, went so far as to state that "the investors themselves determine the cost of utility equity capital. The commission is satisfied to let the verdict rest in their hands."

**W**HAT can investors do to aid the regulatory process during the present period of dynamic utility growth? They can take the negative method of merely withholding investments where the regulatory atmosphere is unfavorable; eventually this may work out, but during the interim consumers may be deprived of essential utility service. The positive

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approach is better—investors and analysts should try to help regulatory agencies by seeking opportunities to discuss their methods and decisions.

The investor in common stocks is the acute problem at this time, Mr. O'Neil points out; in fact, the balance for common stock also determines the margin of safety for senior securities. Investors are not especially concerned with the mechanics of regulation—rate base, rate of return, allowed expenses, etc. They look at the end results—past and present share earnings, and future prospects *versus* risks. The past record enters into present appraisal even after there has been a change in the facts, and this "investor momentum" is an important factor which is not sufficiently recognized by regulatory agencies.

**"T**HERE have been periods, and there probably will be again," Mr. O'Neil pointed out, "when the companies need not raise much new capital. It might seem that during such periods the end result might be shaded against investors, with no detriment to consumers. But those periods become part of the record on which investors will make their appraisal when next the utility comes into the market for capital. It follows, then, that if regulation is continuously to function successfully, it must recognize this 'investor momentum,' and cannot shade the end result merely because there is no immediate need for the investors' capital."

The investment analysts usually have more time to analyze these problems than the investors themselves, and they should serve the latter by conferring with the regulatory agencies and explaining their views, Mr. O'Neil indicated.

### *What to Do When Acquisition Cost Is Far below Original Cost?*

**O**NE of our readers has advised us of an interesting problem now facing a regulatory commission. A company

# FINANCIAL NEWS AND COMMENT

under the jurisdiction of the commission has made a purchase of an operating plant at a fraction of its original cost. The company is claiming recognition of the original cost both as to depreciation and capital return. The engineering staff of the commission states that depreciation alone should be allowed on the original cost, but that rate of return should be related only to the actual cost to the present owners. The latter, on the other hand, claim that the benefit of their wise purchase should not be passed on to the consumers but retained by the company. Fixing of a purchase-cost rate base would mean confiscation of their property rights value, it is maintained.

It is a little dangerous to generalize perhaps without citing all the particulars of the case. However, in general, the company's position seems somewhat similar to that of a company which owns an old plant with very low original cost and which is claiming cost of reproduction as a rate base. "Fair value" state com-

missions would probably allow a rate base in between the original cost and cost of reproduction, while other state commissions would adhere to original cost. In our opinion the "fair value" approach is better, particularly in an inflationary period, since the burden or penalties imposed by inflation are divided between consumers and the stockholders. In the present instance, assuming that the commission has discretion and that cost of reproduction (less depreciation) exceeds the purchase price, it would seem reasonable to allow a rate base somewhat in excess of the purchase price.

However, it may be noted that if the commission adopts the staff proposal, the depreciation accrual would be quite high in relation to acquisition cost. Thus, on an actual cash basis the return to the new owners would be fairly generous, even if they were limited to a 6 per cent return on acquisition cost. To some extent, at least, this would reward management for having made a favorable purchase.



## FINANCIAL DATA ON ELECTRIC UTILITY STOCKS

1951 Rev. (Mill.)			11/26/52	Div. Rate	Cur- rent Yield	—Share Earnings*—			Price- Earnings Ratio	Divi- dend Pay- out
			Price About			Cur. Period	% In- crease	12 Mos. Ended		
\$193	S	American Gas & Elec. ...	65	\$3.00#	4.6%	\$4.64**	D2%	Sept.	14.0	65%
22	O	Arizona Public Service ..	15½	.80	5.2	1.19	75	Sept.	13.0	67
6	O	Arkansas Mo. Power ....	19	1.10	5.8	1.51	23	Sept.	12.6	73
20	S	Atlantic City Elec. ....	26	1.30	5.0	1.75	13	Sept.	14.9	74
4	O	Bangor Hydro-Elec. ....	28	1.60	5.7	1.97	—	Sept.	14.2	81
2	O	Beverly G. & E. ....	50	3.70†	7.4	4.13	31	Dec.	12.1	97
3	O	Black Hills P. & L. ....	20	1.28	6.4	1.73	D6	June	11.6	74
74	B	Boston Edison ....	50	2.80	5.6	3.31	8	Sept.	15.1	85
13	C	California Elec. Pr. ....	11	.60	5.5	.90	84	Sept.	12.2	67
12	O	Calif. Oregon Power ....	27	1.60	5.9	1.68	9	Oct.	16.1	95
40	S	Carolina P. & L. ....	39	2.00	5.1	3.01	12	Oct.	13.0	66
18	S	Gen. Hudson G. & E. ....	12	.70	5.8	.88	57	Sept.	13.6	80
14	O	Central Ill. E. & G. ....	26	1.30	5.0	2.30	8	Sept.	11.3	57
22	S	Central Ill. Light ....	38	2.20	5.8	2.64	D6	Oct.	14.4	83
33	S	Central Ill. P. S. ....	21	1.20	5.7	1.55	5	Sept.	13.5	77
8	O	Gen. Louisiana Elec. ....	36	2.00	5.6	3.10**	NC	Sept.	11.6	65
24	O	Central Maine Power ...	20	1.20	6.0	1.51	14	Oct.	13.2	79
80	S	Central & S. W. ....	20	1.00	5.0	1.58	18	Sept.	12.7	63
8	O	Central Vermont P. S. ..	14	.84	6.0	1.18**	30	Oct.	11.9	71
77	S	Cincinnati G. & E. ....	40	2.00#	5.0	2.80	1	Sept.	14.3	71
5	O	Citizens Utilities ....	13	.36#	5.8a	.85	21	Sept.	15.3	42
80	S	Cleveland Elec. Illum. ..	53	2.60	4.9	4.01	13	Sept.	13.2	65
2	O	Colorado Cent. Power ...	18	1.00	5.6	1.38	11	Sept.	13.0	72
31	S	Columbus & S. O. E. ....	26	1.40	5.4	1.98	24	Sept.	13.1	71
281	S	Commonwealth Edison ..	33	1.80	5.5	2.27	17	Sept.	14.5	79
7	C	Community Pub. Ser. ...	21	1.00#	4.8	1.63	41	Sept.	12.9	61

## PUBLIC UTILITIES FORTNIGHTLY

1951 Rev. (Mil.)	(Continued)	11/26/52 Price About	Div. Rate	Cur- rent Yield	Share Cur. Period	Earnings* % In- crease	Ended 12 Mos.	Price- Earnings Ratio	Divi- dend Pay- out
1	O Concord Electric .....	36	2.40	6.7	2.52	D5	Dec.	14.3	95
48	O Connecticut L. & P. ....	16	.88†	5.5	.98**	—	Oct.	16.3	90
16	O Connecticut Power .....	39	2.25	5.8	2.42	3	Sept.	16.1	93
418	S Consol. Edison .....	38	2.00	5.3	2.51	17	Sept.	15.1	80
84	S Consol. Gas of Balt. ....	27	1.40	5.2	1.77**	7	Sept.	15.3	79
129	S Consumers Power .....	37	2.00	5.4	2.71	2	Sept.	13.7	74
49	S Dayton P. & L. ....	36	2.00	5.6	2.59	—	June	13.9	77
23	S Delaware P. & L. ....	26	1.20	4.6	1.66	D7	Sept.	15.7	72
6	O Derby G. & E. ....	22	1.40	6.4	1.45	D30	Dec.	15.2	97
164	S Detroit Edison .....	25	1.40	5.6	1.62	4	Sept.	15.4	86
89	C Duke Power .....	99	4.00	4.0	7.00	11	Sept.	14.1	57
76	O Duquesne Light .....	30	1.50	5.0	2.05	7	Sept.	14.6	73
7	O El Paso Electric .....	24	1.20	5.0	1.92	8	Sept.	12.5	63
9	S Empire Dist. Elec. ....	25	1.40	5.6	2.33	24	Oct.	10.7	60
4	O Fitchburg G. & E. ....	48	3.00	6.3	3.12	D15	Dec.	15.4	96
25	S Florida Power Corp. ....	24	1.20	5.5	1.67	65	Sept.	14.4	72
55	S Florida P. & L. ....	34	1.60	4.7	2.63	8	Sept.	12.9	53
137	S General Pub. Util. ....	27	1.60	5.9	2.07	35	Sept.	13.0	77
5	O Green Mt. Power .....	19	1.20	6.3	1.79	D8	Sept.	10.6	67
33	S Gulf States Util. ....	27	1.20	4.4	1.82	23	Sept.	14.8	66
18	C Hartford E. L. ....	52	2.75	5.3	2.68	D7	Sept.	19.4	103
4	O Haverhill Electric .....	33	2.40†	7.3	2.59	D17	Dec.	12.7	93
41	S Houston L. & P. ....	25	1.00	4.0	1.72	32	Oct.	14.5	58
17	S Idaho Power .....	45	1.80	4.0	2.98	3	Sept.	15.1	60
51	S Illinois Power .....	40	2.20	5.5	2.76	D8	Sept.	14.5	80
31	S Indianapolis P. & L. ....	39	2.00	5.1	3.14	18	Sept.	12.4	64
15	S Interstate Power .....	10	.60	6.0	.84	25	Sept.	11.9	71
16	O Iowa Elec. L. & P. ....	19	1.10	5.8	1.60	11	Sept.	11.9	69
24	S Iowa-Ill. G. & E. ....	28	1.80	6.4	2.12	D5	Sept.	13.2	85
25	S Iowa Power & Light .....	25	1.40	5.6	1.64	D3	Sept.	15.2	85
22	O Iowa Pub. Service .....	23	1.40	6.1	1.64	2	Oct.	14.0	85
9	O Iowa Southern Util. ....	19	1.20	6.3	1.44	35	Oct.	13.2	83
36	S Kansas City P. & L. ....	30	1.60	5.3	2.10	29	Sept.	14.3	76
16	O Kansas Gas & Elec. ....	36	2.00	5.6	2.73	14	Oct.	13.2	73
29	S Kansas Pr. & Lt. ....	19	1.12	5.9	1.44	13	Sept.	13.2	78
27	O Kentucky Utilities .....	18	1.00	5.6	1.57	10	Sept.	11.5	64
5	O Lake Superior D. P. ....	32	2.00	6.3	2.91	14	Sept.	11.0	69
6	O Lawrence G. & E. ....	33	1.90†	5.8	2.65	D15	Dec.	12.5	91
53	S Long Island Lighting ...	18	.90	5.3	1.29	26	Sept.	13.2	70
35	S Louisville G. & E. ....	38	1.80	4.7	3.22	8	Sept.	11.8	56
6	O Lowell Elec. Lt. ....	45	3.35†	7.4	3.70	D7	Dec.	12.2	91
8	O Lynn G. & E. ....	29	1.60	5.5	1.56	D26	Dec.	18.6	103
6	O Madison G. & E. ....	34	1.60	4.7	2.47	7	Dec.	13.8	65
3	C Maine Public Service ...	19	1.20	6.3	1.35	D3	Sept.	14.1	89
3	O Michigan G. & E. ....	31	1.80	5.8	2.86	15	Sept.	10.8	63
112	S Middle South Util. ....	27	1.30	4.8	2.08**	13	Sept.	13.0	63
17	S Minnesota P. & L. ....	38	2.20	5.8	3.20	1	Oct.	11.9	69
1	O Missouri Edison .....	11	.70	6.4	1.23	18	Sept.	8.9	57
6	C Missouri P. S. ....	22	1.00	4.5	1.56	D9	Dec.	14.1	64
5	O Missouri Utilities .....	18	1.00	5.6	1.55	D3	Sept.	11.6	65
27	S Montana Power .....	29	1.55†	5.3	2.54	12	Sept.	11.4	61
13	C Mountain States Pr. ....	14	.84	6.0	1.07	8	Sept.	13.1	79
105	S New England Elec. ....	14	.90	6.4	1.15	2	Sept.	12.2	78
34	O New England G. & E. ...	15	1.00	6.7	1.33**	14	Oct.	11.3	75
38	O New Orleans P. S. ....	41	2.25	5.5	2.81	2	Sept.	14.6	80
2	O Newport Electric .....	30	2.00	6.7	2.73	8	Sept.	11.0	73
57	S N. Y. State E. & G. ....	35	1.90	5.4	2.32	27	Oct.	15.1	82
176	S Niagara Mohawk Power .	28	1.60	5.7	1.99	26	Sept.	14.1	80
89	S North American .....	24	1.20	5.0	1.41	15	Sept.	17.0	85
51	O Northern Ind. P. S. ....	27	1.52	5.6	2.27	6	Oct.	11.9	67
89	S Northern States Pr. ....	13	.70	5.4	.95	22	Sept.	13.7	74
8	O Northwestern P. S. ....	14	.90	6.4	1.36	9	Sept.	10.3	66
96	S Ohio Edison .....	37	2.20	5.9	2.86	8	Oct.	12.9	77

# FINANCIAL NEWS AND COMMENT

1951 Rev. (Mill.)	(Continued)	11/26/52 Price About	Div. Rate	Cur- rent Yield	Share Cur. Period	Earnings* % In- crease	12 Mos. Ended	Price- Earnings Ratio	Divi- dend Pay- out
29 S	Oklahoma G. & E. ....	25	1.40	5.6	1.93	20	Sept.	13.0	73
13 O	Otter Tail Power .....	24	1.50	6.3	1.83	D2	Sept.	13.1	82
279 S	Pacific G. & E. ....	38	2.00	5.3	2.49**	16	Sept.	15.3	80
20 O	Pacific P. & L. ....	20	1.10	5.5	1.74	29	Sept.	11.5	63
85 S	Penn. Power & Light ....	32	1.60	5.0	2.50	20	Sept.	12.8	64
7 C	Penn Water & Power ....	40	2.00	5.0	2.24	—	Dec.	17.9	89
165 S	Philadelphia Elec. ....	32	1.50	4.7	2.28	14	Sept.	14.0	66
25 O	Portland Gen. Elec. ....	32	1.80	5.6	2.66**	—	Sept.	12.0	68
43 S	Potomac Elec. Power ....	18	1.00	5.6	1.37	26	Sept.	13.1	73
49 S	Pub. Serv. of Colo. ....	31	1.40	4.5	2.05	1	Sept.	15.1	68
201 S	Pub. Serv. E. & G. ....	27	1.60	5.9	2.11	NC	Mar.	12.8	76
50 S	Pub. Serv. of Ind. ....	34	1.80	5.3	2.42	23	Sept.	14.0	74
17 O	Public Serv. of N. H. ....	28	1.80	6.4	2.06**	10	Oct.	13.6	87
7 O	Public Serv. of N. M. ....	10	.56	5.6	.71	D5	Sept.	14.1	79
21 O	Puget Sound P. & L. ....	23	.80	3.5	1.65	D2	Sept.	13.9	48
38 S	Rochester G. & E. ....	40	2.24	5.6	2.90	25	Sept.	13.8	77
8 O	Rockland L. & P. ....	11	.60	5.5	.69	2	Sept.	15.9	87
6 S	St. Joseph L. & P. ....	27	1.60	5.9	2.11	9	Sept.	12.8	76
29 O	San Diego G. & E. ....	16	.80	5.0	1.41	24	Sept.	11.3	57
11 S	Scranton Electric ....	16	1.00	6.3	1.11	D8	Sept.	14.4	90
5 O	Sierra Pacific Pr. ....	26	1.60	6.2	2.21	9	Sept.	11.8	72
118 S	So. Calif. Edison ....	38	2.00	5.3	3.04	NC	Sept.	12.5	66
23 S	So. Carolina E. & G. ....	12	.60	5.0	.80	82	Sept.	15.0	75
4 O	Southern Colo. Pr. ....	11	.70	6.4	.89	4	Aug.	12.4	79
154 S	Southern Company ....	16	.80	5.0	1.18	26	Oct.	13.6	68
11 S	So. Indiana G. & E. ....	25	1.50	6.0	2.07	7	Oct.	12.1	72
2 O	Southwestern E. S. ....	16	.96	6.0	1.48	7	Sept.	10.8	65
23 O	Southwestern P. S. ....	21	1.20	5.7	1.45**	10	July	14.5	83
13 C	Tampa Electric ....	43	2.40	5.6	3.22**	5	Sept.	13.4	75
82 S	Texas Utilities ....	45	1.88	4.2	3.01	25	Sept.	15.0	62
31 S	Toledo Edison ....	12	.70	5.8	1.00	15	Sept.	12.0	70
7 O	Tucson G. E. L. & P. ....	30	1.60	5.3	2.30	41	Sept.	13.0	70
23 O	United Illuminating ....	43	2.40†	5.6	2.38	D16	Dec.	18.1	100
2 O	Upper Peninsula Pr. ....	17	1.20	7.1	1.41	—	Sept.	12.1	85
24 S	Utah Power & Light ....	33	1.80	5.5	2.27	3	Sept.	14.5	79
69 S	Virginia E. & P. ....	26	1.40	5.4	1.80**	4	Oct.	14.4	78
18 S	Washington Water Pr. ....	26	1.50	5.8	1.72	41	Sept.	15.1	87
100 S	West Penn Elec. ....	36	2.20	6.1	3.13	20	Sept.	11.5	64
54 O	West Penn Power ....	40	2.00	5.0	2.37	20	Sept.	16.9	84
8 O	Western Lt. & Tel. ....	24	1.60	6.7	2.34	13	Sept.	10.3	68
19 O	Western Mass. Cos. ....	33	2.00	6.1	2.10	D22	Dec.	15.7	95
73 S	Wisconsin Elec. Power ....	28	1.40	5.0	1.73	7	Sept.	16.2	81
26 O	Wisconsin P. & L. ....	21	1.20	5.7	1.63	33	Sept.	12.9	74
25 O	Wisconsin Pub. Ser. ....	19	1.10	5.8	1.30	4	Sept.	14.6	85
Averages .....				5.6%				13.6	75%

## Foreign Companies††

173 S	Amer. & For. Power ....	8	\$ .10 #	1.3%	\$1.93	D17%	June	4.1	—
134 C	Brazilian Tract. L. & P. ....	9†	1.00	10.5	2.47	5	Dec.	3.8	40%
15 C	Gatineau Power ....	21	1.20	5.7	1.30	D11	Dec.	16.2	92
25 O	Mexican L. & P. ....	4	—	—	.44	193	Dec.	9.1	—
8 C	Quebec Power ....	19	1.00	5.3	1.17	D11	Dec.	16.2	86
37 C	Shawinigan Water & Pr. ....	42	1.45†	3.5	1.84	D7	Dec.	22.8	79
16 C	Winnipeg Electric ....	40	2.40	6.0	2.26	D7	Dec.	17.7	106

B—Boston exchange. C—Curb exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. D—Decrease. NC—No comparable figures available. \*If additional common shares have been recently offered, earnings are adjusted to give effect to the offering. Percentage change is in the balance available for common stock. †Estimated (rate irregular or includes extras). ††With the exception of American & Foreign Power, these stocks are also listed in Canada and the Canadian prices are used. (Curb prices are affected by exchange rates, etc.) # Stock dividend also paid. \*\*Based on average number of shares. a—Includes regular stock dividend.



# What Others Think

## Story of a Great Utility



**T**HIS year, 1952, marks the centennial of one of America's most outstanding companies, Pacific Gas and Electric of California. In commemoration of the event, Charles M. Coleman has written a picturesque and wholly satisfying account of the turbulent and colorful events which accompanied the development of the gigantic system which now serves northern and central California.

The author might have given us a dreary, blow-by-blow account, written in the tone of an economist or corporate historian, of the gradual consolidation of some 500 companies into the present system which is now PG&E. It so happens that Mr. Coleman is the corporate historian of PG&E, but he has happily chosen to tell his story in terms of the men who struggled to build a utility system which would best serve the ever-growing population of California. All this in the face of what would seem insuperable obstacles, to say nothing of the disastrous earthquake (or "fire" for all California readers) which occurred in 1906 in San Francisco. The colorful history of California is essentially a story of courageous and enterprising men who, in a relatively short space of 100 years, transformed a sleepy Spanish colony into an empire which would have made the Spanish kings, at the height of their power, green with envy.

Though each section of the United States rightly prides itself on the men who developed it, California seems to have been particularly favored with characters of extraordinary ability who looked upon the gigantic mountains and endless deserts as mere challenges to their talents and imagination. There is engraved over the stone entrance of the California State Office Building in Sac-

ramento a revealing line from the pen of poet Sam Walter Foss: "Bring me men to match my mountains." California got them, as Mr. Coleman so admirably demonstrates.

**T**HERE was, for instance, one Peter Donahue, whose failure to "strike it rich" in the California hills merely fired his Irish enthusiasm for finding other and more profitable ways of getting along. Joining with his brother James in an iron and brass foundry in San Francisco, he eventually achieved the distinction of being the first to light the streets of San Francisco with gas. The popularity of gaslight stimulated competition. The result was the inevitable rate wars, mergers, and consolidations which form the pattern of much of the industrial development of the United States.

With the advent of electricity, California, needless to say, did not find itself lacking for men able enough to exploit its possibilities. One of the most interesting accounts in Mr. Coleman's book is the development of hydroelectric power on the foundations of the waterworks system built by the gold miners. Hydraulic mining was brought to an end by a court injunction against the washing of silt from the mines into the rivers, but the great aqueduct system, comprising some 8,000 miles of artificial water courses, stood ready and waiting for the hydroelectric power industry. The rapid growth of the industry, though naturally resulting from the pressure of an increasing population, owes not a little to such men as Prince Andre Poniatowski and W. H. Crocker, whose Electra powerhouse supplied the first hydro power to San Francisco; and to John Martin and Eugene J. de Sabla, Jr., whose efforts in



## WHAT OTHERS THINK

consolidating the numerous utility systems which had sprung up led eventually to the formation of the Pacific Gas and Electric Company in 1905.

The ink was barely dry on the papers incorporating PG&E when the great earthquake (or "fire") destroyed a large part of San Francisco. The rôle of the utilities during the crisis, and the incredible difficulties surmounted by the newly formed company in its struggle to survive the disaster, provides one of the most exciting chapters in Mr. Coleman's book.

**T**HE forty-five years following the earthquake have been years of constant expansion to meet the growing needs of an always increasing population and new industries; of new hydroelectric plants, natural gas from Texas, a severe depression, and a constant fight against encroaching government control. Though difficulties between the company and the Bureau of Reclamation seem to have come to a head last year when a 10-year

"wheeling contract" was finally agreed upon by both parties, the ever-increasing danger of Federal control is not likely to be underemphasized by the present directors of PG&E. They can point with pride to the history of their organization and the men who built it as sufficient evidence that the public and private interest are not necessarily contradictory.

Mr. Coleman has performed a service in bringing to public attention the story of this great utility and his book constitutes a valuable contribution to the literature of free enterprise—a literature too often neglected by contemporary students of American history. The record of governmental paternalism seems dull and dismal beside the history of this company which in 1952 as in 1852, asks not for government assistance, but for more Peter Donahues.

—F. M.

P. G. AND E. OF CALIFORNIA, The Centennial Story of Pacific Gas and Electric Company. By Charles M. Coleman. McGraw-Hill Book Company, Inc. New York 18, New York. 1952. Price, \$4.50.

## Business and the Transit Problem

**T**HE Chamber of Commerce of the United States has called on businessmen to help solve some of the problems which are driving many transit firms into municipal ownership. The chamber recently pointed out that city streetcar and bus systems carry 16 billion passengers a year, including 60 to 80 per cent of workers and shoppers.

Some of the problems of private transit companies were listed as follows: Most of their service is provided during morning and evening rush hours and most of their equipment is idle the rest of the day; 60 per cent of every dollar they take in goes out in wages and wage costs have risen 110 per cent in ten years while the cost of vehicles and repairs has jumped 95 per cent; since fare increases must be approved by state and local regulatory bodies, there are long delays before cost increases can be offset by higher fares; discriminatory street-use taxes are levied

on transit firms, even though everyone uses the streets.

As a result of these conditions, the chamber said, the transit industry is earning only a 1.5 per cent return on its value, whereas the average return for 3,409 leading industrial companies in 1951 was 11.4 per cent. The chamber urged city officials, business groups, and civic organizations to promote:

1. Greater use of limited stops, turn-backs, and express service by streetcar and bus lines.
2. Use of one-way streets, elimination of curb parking, restriction of turning movements, and use of modern traffic signal systems to speed public transportation.
3. Elimination of unwarranted extensions and other unprofitable services by streetcar and bus companies.
4. Greater use of streetcars and busses



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by shoppers and workers, especially in the nonrush periods.

5. Staggering of working hours for employees by large business and industrial companies to spread the rush-hour load.

6. Prompt consideration of requests for fare increases and swift relief if warranted.

7. Relief from unfair local taxes and special assessments on transit companies.

**P**OOOR earnings and rising costs have forced many private transit companies into public ownership where direct and indirect tax subsidies were possible. But, the chamber noted, public ownership generally has only made the problem worse.

"Without adequate fares, the municipality must subsidize transit op-

eration (leading) to enormous deficits which must be paid for by increased taxes. Politicians have found that operation of public transit can be a political liability rather than a political asset in some cases. Politics enters into employee relations, often resulting in inordinately higher wage scales. . . . It is a well-known fact that the private owner of a transit company keeps his bookkeeping pencil sharper than any municipal operator."

The chamber's transit proposals are contained in a booklet entitled "Transit's Crisis . . . Businessman's Concern," available at 5 cents each or \$4.50 per hundred on request from the chamber's transportation and communication department, 1615 H street, N. W. Washington 6, D. C.

—F. M.

## State Socialism and Christianity

**A** CLOSE observer of thought trends in the United States over the last two decades could not help to have noticed the increased acceptance among many Americans of the idea that socialization of industry, such as public utilities, is actually little more than practical Christianity. The idea that there is something immoral about making a profit is a logical corollary, to name only one, of such a thesis. The seeming inability or unwillingness of our educational institutions to correct such falacious notions, held among large numbers of young people, may account for the incredible confusion among those calling themselves liberals concerning such phenomena as "McCarthyism." Be that as it may, proponents of the contrary view that Christianity and Socialism have absolutely nothing in common and are, indeed, contradictions in terms, occasionally burst forth with righteous indignation in articles written for the few periodicals which bravely risk being denounced (from the left) as "reactionary."

One such article appears in the December 1st issue of *The Freeman*, a periodi-

cal which the editors call "A Fortnightly for Individualists." The author, the Reverend Dr. Edward A. Keller, CSC, an economics professor at Notre Dame University since 1934, gives a brief but adequate summary of points contained in his book *Christianity v. Socialism*. The belief that the true Christian must of necessity be a Socialist, says the Reverend Keller, "discloses a shocking ignorance of both Christianity and Socialism. There can be no reconciliation between the two because Socialism is based on a theory of human nature and of human society peculiar to itself and irreconcilable with true Christianity."

**T**O the Reverend Keller the contradiction between secular Socialism and Christianity is clearly obvious. He states:

. . . Christianity looks to God and the hereafter for the answer to life; Socialism finds the answer in a Utopia here on earth. Christianity is intrinsically theocentric and supernatural; Socialism, despite its trappings of al-

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truism, is materialistic and secularistic. Christianity teaches that man has both an individual and a social nature; Socialism denies man's sacred individualism, making his nature exclusively collectivistic. Christianity of its very nature demands freedom for the individual, relying on voluntary acceptance of its doctrines; Socialism is authoritarian, forcing submission by physical force or bribery.

**B**ECAUSE it pretends to contain the final answer to the problem of life, Socialism must be condemned by the true Christian, the Reverend Keller writes. In a pungent paragraph on the nature of Socialism, Reverend Keller says:

... While promising the good life, it actually reduces all human living to drab monotony. It denies man the adventure of spiritual living by robbing him of his soul, thereby lowering human life to the level of animal existence. It despoils man of the dignity of individuality, thereby reducing him to the status of a nonentity in the all-important socialist state. By denying man all spiritual and supernatural hope, Socialism destroys the divine spark of humor. Human existence, for the soulless serf of the socialist state, becomes a painful plodding on a treadmill.

Instead of a blind dependence on the processes of evolution to convert the essentially selfish human nature into a completely unselfish human being, Christianity realistically recognizes human selfishness but attempts to control it by appealing for man's voluntary adherence to a God-given moral code, Reverend Keller said. By theoretically substituting the "collective conscience" for the personal conscience, Socialism actually encourages a "vicious individualism" by absolving the individual from all personal moral responsibility. "Without the voluntary restraint of the morally responsible individual members of society, community living becomes intolerable and society degenerates into barbarism," Reverend Keller added.

**M**UCH of the difficulty in the thinking of some Christians, says the Reverend Keller, arises from a confusion of the terms "social" and "collective." "Some Christians are inclined toward the socialist society because they overemphasize the social side of human nature to the practical exclusion of man's sacred individualism. They fail to understand that the Christian must be an individualist because man is made in the image and likeness of his Creator. To the Christian, the worth of the individual soul exceeds that of the universe. This is the basis for the Christian teaching of equality, as so clearly expressed in our Declaration of Independence." It should be noted, however, that "this spiritual equality does not extend to equality of talents and other natural gifts. Socialist equalitarianism flouts the Will of the Creator which created human beings so individualistic that no two ever had identical fingerprints."

According to the Reverend Keller, one has only to recall the Commandments of God to discover the Christian condemnation of Socialism. Two of them, "Thou shalt not steal" and "Thou shalt not covet thy neighbor's goods," directly contradict the socialist denial of the right of private property. But by far the worst feature of Socialism, in the Reverend Keller's view, is its socialization of charity—the foundation of Christianity and "the test of salvation and the personal obligation from which the true Christian cannot excuse himself, regardless of how much he possesses." Personal charity is nonexistent in the socialist state. "The cradle-to-the-grave security of the socialist Welfare State is un-Christian because it makes the individual a moral slave of the state. When individuals feed at the breast of the Welfare State, they become her wards. Destroy the independence of the moral person and you destroy the integrity of his personality."

**S**Ocialism, in short, is the last refuge of weak and fearful personalities who have failed to live up to their moral obligations as Christians and are attempting to hide their own guilty consciences behind a false doctrine of humanitarianism.

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Having little faith themselves, they assume for their own protection that faithlessness is a universal human characteristic. "The instinctive Socialist finds his God in a nameless and hopeless humanity. To give some form to this shapeless mass he gives to the state the adoration and authority that belong only to God. The First Commandment having been outlawed, the next logical step is the discarding of all God's Commandments," the Reverend Keller declared.

The Notre Dame professor attributes the moral degeneracy so prevalent in the United States today to an "extensive in-

fection of human society with the destructive virus of materialistic Socialism. When man becomes amoral he becomes the pliable clay from which it is easy to model the socialist slave—a human being willing to trade his spiritual inheritance for a mess of pottage." Transformed into a robot, responsible only to his earthly master who is the collective representative of himself, by turning to Socialism, the Reverend Keller concluded, "man finally has discovered a method of self-destruction by creating himself in his own image."

—F. M.

### Security Analysts Urge Stronger Utility Industry

"WE are in good times—or what appear on the surface to be good times—and this is the occasion to make still further progress in improving the soundness of our essential utility industry," James A. Lyles, vice president of The First Boston Corporation, told a recent meeting of the New York Security Analysts. The subject under discussion was the utility rate of return from the investor's viewpoint.

"Failure of the utilities to be allowed to maintain a fair earning power," Lyles said, "will ultimately result in investors turning from their utility securities. And when the investors want 'out' they will want it quick. After that occurs, if it does, both regulation and management will have an extremely difficult time putting Humpty Dumpty back together again," Lyles told the group.

Dr. Alexander Sachs, economist and director of the Lehman Corporation, pointed out that regulatory thinking has been taken from the past and never recognizes the future. He compared the current situation to the status of the railroads in the 1920's. He urged the use of reproduction cost in rate making and said that depreciation has been too low.

Dr. James C. Bonbright, professor of finance at Columbia University, asserted that allowances for interest during con-

struction have been inadequate, citing the Northern Natural Gas Case before the Federal Power Commission. He also cited the failure of regulatory bodies to make adequate allowance for cash working capital. He said he was alarmed at the trend of some commissions in pinching off pieces as in rate returns or rate bases in their zeal to hold rate increases to a minimum.

LYLES urged adoption of a policy by commissions which would permit temporary rate increases, not niggardly in amount. Such increases, subject to review, would have to be in form and not under bond or other method of withholding, he said. He also expressed the view that more consideration should be given by regulatory bodies to granting rate increases in the light of near-term financing requirements. He pointed out that major items of utility expenditures are definitely known as much as two or three years in advance, and revenues and expenses can be forecast with reasonable accuracy for a year or so. He said the burden of financing additions would be materially eased if rate increases could be obtained on the basis of a conservative forecast of plant investment, earnings, and security issues for as much as two years in advance.

# The March of Events



## In General

### American Economic Association To Meet

THE natural gas industry will be the subject of one program of the American Economic Association meeting to be held in Chicago, Illinois, on December 29th in the Hotel Conrad Hilton.

Professor Dudley F. Pegrum of the University of California will give a paper on the economics of production, conservation, and distribution of natural gas, and H. J. O'Leary of the Wisconsin Public Service Commission will talk on the Wisconsin experience in introducing and utilizing natural gas.

Professors H. M. Gray of the University of Illinois and Joseph M. Rose of the University of Pennsylvania will discuss these papers. Nonmembers are invited to participate in the floor discussion.

### St. Lawrence Plan Opposed

THE St. Lawrence power project as approved by the International Joint Commission could result in users of the power paying more than their share of the cost of Canada's St. Lawrence seaway project, an American member of the commission argued recently.

In a dissent from the commission's decision, announced last October, Roger

B. McWhorter said procedures apparently contemplated by the United States and Canadian governments would result in loading upon power more than \$100,000,000 in costs "which navigation rightfully should bear."

Two St. Lawrence river projects are involved. One is to produce power, the other is a seaway designed to give ocean-going ships access to the Great Lakes.

### Rates Boosted in Northwest

THE drought-caused power shortage in the Pacific Northwest has forced three utility companies to increase rates to offset the cost of steam-generated electricity, it was reported recently. All steam plants in the region are attempting partly to make up the power shortage.

On all billings after November 24th, Portland General Electric Company and Mountain States Power Company would increase rates 20 per cent, it was said. Pacific Power & Light Company would boost rates 20 per cent in the Portland area.

Right to the surcharge already has been granted by the Oregon Public Utilities Commissioner. Pacific Power had an application before the Washington Public Service Commission to raise rates in that state 11 per cent.

## Arkansas

### Ordered to Establish Rate Schedule

THE state public service commission last month ordered Arkansas-Louisiana Gas Company to establish a rate schedule that would yield \$11,706,400 from its 43 industrial customers in 1952 and each year thereafter.

Investigations and hearings have been under way for the past three years on rate questions involved in the company's service to its industrial consumers, who consume about two-thirds of all of the gas which Arkansas-Louisiana Gas distributes in Arkansas.

The order directed rates and service contracts should be uniform between in-

## PUBLIC UTILITIES FORTNIGHTLY

dustrial customers. Compliance with the order is expected to result in refunds of

about \$260,000 to the company's industrial customers.

### California

#### Utilities Ask Boost in Gas Rates

**S**OUTHERN CALIFORNIA GAS COMPANY and Southern Counties Gas Company, operating subsidiaries of the Pacific Lighting Corporation, have applied to the state public utilities commission for emergency rate increases. They said the boost is to meet an extra  $4\frac{1}{2}$  cents a thousand cubic feet charge granted the El Paso Natural Gas Company, effective January 1st.

To meet the extra El Paso charge, the firms said, would cost them "about \$6,500,000" a year, \$4,900,000 for Southern California Gas Company and \$1,600,000

for Southern Counties. They have requested permission to pass these increased operating expenses on to their customers. The average monthly rate increase would be 15 cents for Southern California gas consumers and 10 cents a month for Southern Counties' customers.

The state commission already had a petition from Southern California Gas Company for a rate increase totaling "approximately \$8,000,000," or an average increase of 45 cents a month a customer. Hearings were continuing last month on Southern Counties' June application for an annual rate increase of \$4,850,000, or 88 cents a month a customer.

### District of Columbia

#### Asks Boost in Retail Gas Rates

**T**HE Washington Gas Light Company last month asked the District of Columbia Public Utilities Commission for authority to raise its retail gas rates by 4.6 per cent.

The company said this would raise its gross operating revenues by \$850,000, of which "more than half" would go for taxes.

Last May, Washington Gas Light got a rate increase of \$1,723,000, its first in many years. In applying for the new in-

crease, it told the commission it was trying to anticipate an expected increase in the wholesale rates it has to pay for gas. Its supplier is the Atlantic Seaboard Corporation, which now has before the Federal Power Commission an application for higher rates.

Seaboard was given two increases by FPC a year ago, which resulted in higher charges to Washington Gas of about \$1,500,000 annually. The new Seaboard increase, if allowed, would raise charges to Washington Gas Light by about \$700,000.

### Florida

#### Companies under Study

**T**HE state utilities commission recently called on four Florida power companies to supply it with their operating and statistical reports for a 12-month period.

The action is another step in the commission investigation of "whether present electric rates and charges are just

and reasonable." The period for which the companies must report is the year ending September 30th. The information must be in by January 1st.

Together, the four companies under study supply most of the state with electricity. They are Florida Power & Light, Tampa Electric Company, Florida Power Corporation, and Gulf Power Company.



## THE MARCH OF EVENTS

### Massachusetts

#### Asks Sweeping Investigation

STATE Senator Philip G. Bowker of Brookline, last month asked for a sweeping investigation of the "battle between two gigantic combines" for control of natural gas in New England. Bowker asked that the state legislature set up a special commission to investigate the Northeastern Gas Transmission Company and the Algonquin Gas Transmission Company.

Both organizations were appearing before the Federal Power Commission in Washington. The FPC ordered the hearings to see if it has the authority to let Algonquin start operating its nearly completed pipeline on a temporary certificate.

The Republican senator, citing the "economic struggle for the control of the supply of natural gas to the New Eng-

land area," said the public—"the ultimate consumer"—has had little to say.

"It is imperative for the protection of the general public as the main party at interest, that a sensible and proper investigation and evaluation of the entire scene be undertaken," he said.

Bowker's proposal also calls for investigation of the "competitive features of the natural gas industry and the rate charges by competing lines."

In Washington last month the Northeastern Gas Transmission Company accused Algonquin of "deliberately creating" a natural gas emergency in New England to force the government to authorize temporary operation of the Algonquin system.

Governor-elect Christian A. Herter had told the hearing he believed the state and territory would best be served by two competent gas distributors.

### Mississippi

#### Pipeline Tax Ruled Legal

THE state supreme court, in a 5-to-4 split decision, last month held that Mississippi can tax interstate gas pipelines operating through the state. The court overruled a lower court decision that the privilege tax on interstate pipelines is illegal.

An appeal will be taken to the United States Supreme Court, attorneys for the

gas pipeline companies said recently.

There were 11 cases involved in the controversy, but the court decided the case of J. P. Coleman, Attorney General *v.* Trunkline Gas Company, and let it be the ruling for all.

The other companies which brought the separate suits that were controlled by the Trunkline decision included Texas Eastern Transmission Company and Texas Gas Transmission.

### Virginia

#### Refuses to Review Utility Strike Law

THE United States Supreme Court last month refused to meet a request of a longshoremen's union local and rule on a 1947 Virginia law restricting strikes by employees of public utilities.

State Attorney General J. Lindsay Almond had specifically asked the high court to refuse a hearing to Local 333B, United Marine Division of the International Longshoreman's Association,

AFL. He pointed out that the law has since been repealed and contended that Supreme Court action now would actually affect only the local and two of its officers.

The refusal to rule on the old Virginia public utility labor law stemmed back to June 22, 1951, when the AFL union members who work on Virginia Ferry Corporation vessels between Kiptopeke Beach and Little Creek, Virginia, went on strike.





## Progress of Regulation

### Power Project License May Be Made Subject to Conditions

THE United States Supreme Court upheld the authority of the Federal Power Commission to impose conditions on a power project license award. The project was to be constructed on government lands and would have transmission lines crossing these lands. In authorizing the project, the commission had imposed conditions requiring the licensee to permit the interconnection of transmission facilities of the United States with its own lines and to transmit Federal government power over the licensed lines to the extent of excess capacity above the company's own needs.

The court said that § 6, read in the context of §§ 4 and 10 of the Federal Power Act, would seem to give ample authority to the commission to attach the conditions. Protection of the public domain, conservation of water-power resources, and development of comprehensive plans for the waterways were deemed to be sufficient to authorize the grant of permission to a public utility company to use the public domain provided it agreed to use its excess capacity to transmit government power. The court decided that Part II of the act did not repeal by implication the powers over licensees that were deeply engrained in Part I of the act and put there by Congress for the purpose of protecting the public domain.

The United States Court of Appeals [in 89 PUR NS 87] had entered a judgment that the commission's order be modified by striking the conditions from the order. This action, in effect, modified the license. The Supreme Court held this to be error. It said that Congress had placed its reliance for control of power project licenses on the Federal Power Commission's judgment. When the court of appeals decided that the license should issue without the conditions, it usurped an administrative function.

It was conceded that the lower court had power "to affirm, modify, or set aside" the order of the commission "in whole or in part." But, the court said, that authority is not power to exercise an essentially administrative function. The nature of the determination was emphasized by § 10(a) of the act, which specifies that the project adopted "shall be such as in the judgment of the commission will be best adapted to a comprehensive plan for the improvement and utilization of water-power development, and for other beneficial public uses." The court held that whether that objective may be achieved if the contested conditions are stricken from the order is an administrative, not a judicial, decision. *Federal Power Commission v. Idaho Power Co. November 10, 1952.*



### Eligibility of Holding Company Director Upheld

THE supreme judicial court of Maine held that a director who entertained

the same views on corporate financial problems as did investment bankers who

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## PROGRESS OF REGULATION

urged him to run for the office, voted for him, and, by their votes, enabled him to be elected director of a holding company in the process of dissolution, was not an "appointee" or "representative" of such investment bankers within the statute forbidding such persons from being directors of holding companies.

There was no evidence that the party owed any express or implied duty to the bankers to support or carry out their views. Nor was there any evidence that he was not to exercise his own independent judgment as to what would be for the best interests of the corporation in any of his acts as director. On the other hand, the right of entire freedom of action on his part, as such director, was clearly established.

Those claiming that the director was ineligible argued that the Holding Company Act was intended to prevent banker control of public utilities. The purpose of Congress in enacting the statute was conceded. To that end certain persons are prohibited by § 17(c) of the act from acting as directors of holding companies.

Among those so disqualified is an appointee or representative of any investment banker. The court observed that it makes no difference how high-minded or otherwise qualified a person may be. If he comes within one of the prohibited classes enumerated, he is barred from holding office. But the court said that directors of corporations in Maine are elected, not appointed, and a person is not a representative of an outside interest, such as an investment banker, if he is not in any way under the control of such interest and answerable to it for his acts.

The president of the holding company declared that the director-elect was not qualified to serve because of the statutory prohibition. The president's duties as presiding officer at the annual meeting were held to be ministerial rather than judicial. By declaring the ineligibility of the director-elect he usurped a prerogative of the court. Consequently, his decision on this point was held to be without any standing whatsoever. *Gilman v. Jack*, 91 A2d 207.



### Unnecessary Flowage Rights Properly Excluded from Electric Rate Base

A RATE order of the Vermont commission was affirmed in so far as it fixed a rate of return to be allowed an electric company, but was reversed and remanded for the limited purpose of re-computing the allowances for Federal income taxes and for cost of service. The supreme court of Vermont affirmed findings that a return of 6½ per cent would be sufficient for the company to pay all interest charges and dividends on preferred stock, to maintain its present dividend rate on common stock, and to leave a substantial balance for surplus.

The commission was held to have properly excluded from the company's rate base certain flowage rights which were included under the heading "Property Held for Future Use." The company had no definite plans for the use of such property in the near future. This land and the water rights were allegedly

purchased for the purpose of erecting a dam and developing power. However, evidence indicated that they were purchased to preclude interference with the company's control of the stream flow and thus reduce hydro generation.

The court pointed out that the company could have protected the stream flow at its generating station by only purchasing from the same riparian landowners the right to have the water flow past their lands at its natural level. Such right would have cost far less.

The court believed that the commission showed an awareness of rules governing a proper rate of return as recently announced by the court. For example, the court had announced that the fixing of just and reasonable rates involves a balancing of investor and consumer interests. From the standpoint of the investor there must be enough revenue for

## PUBLIC UTILITIES FORTNIGHTLY

capital costs of the business, including service on the debt and dividends on the stock. The return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. Also the return should provide something for the surplus account. On the other hand, the court said, a public utility has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. It has no right to a rate sufficient to provide for future extensions or additions to its plant.

The company is an operating company and also a holding company. It makes a consolidated income tax return as permitted by the Federal Income Tax Law. The commission had found that an equitable portion of the credits for interest, amortization of debt discount, and

expense should be allocated to Vermont in computing the company's Federal income tax for Vermont, and that an allocation could best be provided by applying the ratio of Vermont's net plant to the company's total net plant.

The nature of the indenture securing the bonds of the company made the plant of the subsidiaries just as much security for the bonds as the company plant, which was directly mortgaged. The commission was held to have erroneously used figures representing total net corporate plant rather than the larger figures for net consolidated plant in computing percentages. The court ordered the commission to correct that error so that smaller sums for interest, amortization of debt discount, and expense would be deducted in computing the company's Federal income taxes on its Vermont plant. *Re Citizens Utilities Co. No. 945.*



### State Commission Lacks Jurisdiction over Conditional Sales Agreement of Interstate Railroad Company

THE Missouri commission dismissed for lack of jurisdiction an interstate railroad company's application for authority to act as a guarantor in a conditional sales agreement for the purchase of railroad cars by its subsidiary. Permission was sought in order that the subsidiary might consummate the purchase agreement at a lower interest cost than was otherwise possible.

The commission pointed out that regulation and control of the issuance of

notes, securities, and other similar documents by interstate railroads subject to the jurisdiction of the Interstate Commerce Commission lie exclusively within the domain of that commission. It held that it lacked jurisdiction in such instances. The commission concluded that the holding in such cases was equally applicable to the guaranty agreement presented in this case. *Re Kansas City Southern R. Co. Case No. 12,392, August 11, 1952.*



### Substitution of Bus for Railroad Service Authorized

AUTHORITY to substitute bus service of a subsidiary company for rail service of a parent company was granted by the Utah commission.

The commission pointed out that in this case both companies operated at a loss. A fire had destroyed the railroad's equipment and shops and the added business to the bus company would enable such company to operate at a profit. The routes of the two companies were closely

paralleled. Since the railroad's equipment was antiquated, public convenience and necessity would be better served by bus service. Finally, the commission said, the railroad intended to continue financial aid to the bus company, if needed, and other carriers along the route would be able to absorb the railroad's railway express business. *Re Bamberger Transp. Co. Case No. 3818, August 21, 1952.*

## PROGRESS OF REGULATION

### Statutory Vertical Clearance of Tunnel Waived

THE Missouri commission, under the statute requiring that the vertical clearance of a tunnel be 22 feet, except where such a clearance is found impracticable, authorized submission of plans for a tunnel with an 18-foot vertical clearance. The facts seemed to justify this proposal.

To lower the tunnel would be impractical and the cost of raising the tunnel

top would be substantial. If the tunnel top were to be raised, it was held, it would create such a slant on a levee that use as a public thoroughfare would be destroyed and would constitute an effective barrier between a proposed national memorial and the Mississippi river which are linked historically. *St. Louis v. Terminal Railroad Asso. of St. Louis, Case No. 11,935, August 7, 1952.*



### Five-year Amortization of Defense Facilities Approved For Accounting Purposes Only

THE Indiana commission authorized an electric company to amortize its emergency defense facilities over a 5-year period pursuant to the provisions of the Internal Revenue Code. The code provides that as to any new facilities constructed for which a government certificate of necessity is obtained, short-term (sixty months) amortization may be used. The consequences, taxwise, of a utility's taking advantage of this new tax provision were described by the commission in these words:

Amortization of such costs in lieu of normal depreciation thereof for Federal income tax purposes will result in reductions in Federal taxes on income during the period of amortization and increase Federal taxes on income thereafter, during any remaining lives of such facilities so amortized. The actual effect of the special rapid amortization of cost of emergency defense facilities is not to create additional income or a tax saving for the petitioner, but simply to defer Federal taxes on income, since the total aggregate tax deduction allowed is the same if the tax rate remains constant whether taken in sixty months or spread over a longer period.

The commission was very specific in approving accounting procedures which the company should follow and in stating that the establishment of these procedures shall not be controlling for rate-

making purposes or security issue purposes. The procedures follow:

(a) Provide on its books of account for depreciation on facilities covered in whole or in part by necessity certificates at rates consistent with those for like facilities not covered in whole or in part by necessity certificates.

(b) During the period of amortization of such emergency facilities, charge to "Provision for Deferred Federal Income Taxes" and to credit to "Appropriated Surplus Arising from Deferment of Federal Income Taxes" an amount or amounts in total for each year equal to the reduction in Federal income taxes arising out of special amortization, as provided in § 124A of the Internal Revenue Code, in excess of the reduction resulting from normal income tax depreciation of the cost of such facilities.

(c) After the expiration of the effective amortization period and until "Appropriated Surplus Arising from Deferment of Federal Income Taxes," applicable to specific facilities is exhausted or such facilities are retired from service, charge "Appropriated Surplus Arising from Deferment of Federal Income Taxes" and credit "Portion of Current Federal Income Taxes Deferred in Prior Years" with amounts equal to the increase in Federal taxes on income resulting from depreciation on the emergency facili-

## PUBLIC UTILITIES FORTNIGHTLY

ties no longer being available for Federal income tax purposes.

*Re Indiana & Michigan Electric Co. Cause No. 23828, October 7, 1952.*



### Federal Power Commission Reaffirms Views on Return Related to Cost of Capital

THE Federal Power Commission, except for modifying certain rate schedules, denied a petition for rehearing of its decision in *Re Colorado Interstate Gas Co.* (1952) 95 PUR NS 97, where it had allowed a return of 5½ per cent to provide a return on common stock equity of 8.45 per cent after servicing of debt and preferred stock requirements and after allowance for income taxes.

The commission said there were no facts of record which showed what the rate of debt money would be at some unknown time in the future when the company might raise additional debt capital, and the use of a higher interest rate than that presently being paid by the company would therefore merely represent an unwarranted additional allowance for the common stock equity and would not represent proper cost of debt capital.

As to a contention that, in measuring the return required by investors, the commission had misapplied the percentage relationship of the earnings available to common stock to the market value of common stock (the earnings-price ratio), the commission said:

Colorado argues that if the earnings-price ratio is used it should be applied to the market value base for the stock instead of the book value. Such an application would have the effect of departing from the investment rate base and substituting, in part, a fair value base according to the proportion of common stock to other capital of the company.

In the alternative, Colorado contends that the 8.45 per cent earnings-price ratio should be applied to the actual investment in such manner as to effect a 13.79 per cent return on the common equity. This contention is as novel as it is lacking in merit. It, too, would require the rate of return to be

fixed so as to maintain the market value of the stock. This is circular reasoning. It is well known that the chief factor affecting the market value of a common stock is the earnings of a corporation. Accordingly, inasmuch as market value reflects the earnings position, the allowance of earnings sufficient to maintain that market value would completely defeat effective regulation. Excess earnings would result in excess market value which, under the theory, must be maintained; inadequate earnings which would result in a depressed market value would likewise have to be maintained if all that is required under the principle stated is the maintenance of the market value of the stock. Under this scheme, if high earnings are once obtained they could never be reduced through rate regulation, whereas inadequate earnings could not be increased. The plan is entirely devoid of merit. Market values of securities are the result and not the cause of earnings. A fundamental error would be committed in the determination of a fair rate of return if it were fixed with a view of maintaining the market value of securities.

The commission said that it has long been recognized that the best means of determining what investors require in the way of return as to all classes of capital, debt, preferred stock, and common stock is by resort to the prices prevailing on the securities markets.

The company also contended that the commission erred in using the relative market value method for allocating between dry gas and natural gasoline, the joint production, gathering, and processing costs. The company, said the commission, seemed to believe that the relative market value method is invalid unless the current market prices of the re-

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spective products are used. The commission did not agree, for in its judgment it would not be proper to use the spot market prices of either dry gas or natural gasoline for allocating joint costs,

and the commission had, therefore, used average market prices both for dry gas and gasoline. *Re Colorado Interstate Gas Co. Opinion No. 235-A, September 29, 1952.*



### Other Important Rulings

THE Federal Power Commission affirmed the working capital determinations set forth in its Opinion No. 228 (to be published in 95 PUR NS 289), overruling a contention that the commission had erred in offsetting tax accruals against working capital requirements on the ground that the company had not received an opportunity to be heard and disapproving the "balance sheet approach" under which the working capital requirement is considered to be the difference between current and accrued assets and current and accrued liabilities as they appear on the balance sheet. *Re Northern Nat. Gas Co. Opinion No. 228-A, September 26, 1952.*

The South Carolina Supreme Court held that a state, directly or through an authorized commission, may require railroads to provide reasonably adequate facilities for the convenience of communities served by them, and railroads may be compelled by state legislation to establish stations, including a union station, at proper places for convenience of patrons. *State ex rel. Public Service Commission v. Atlantic Coast Line R. Co. 72 SE2d 438.*

A Federal district court held that the fact that the proposed acquisition of a portion of a motor carrier's operating rights would enable the transferee to conduct a more economical operation did not entitle the applicant to approval of such application when service different than that of the transferor would be instituted and there was no evidence that such new service would be consistent with the public interest. *Houff Transfer v. United States (US Dist Ct Va 1952) 105 F Supp 851.*

The United States Court of Appeals held that a CAB order temporarily suspending a trunk line carrier's certificate but certifying a feeder airline, was proper where evidence established there was insufficient traffic to support both services and where, instead of a monetary loss, the suspended airline would realize an annual operational gain. *United Air Lines v. Civil Aeronautics Board, 198 F2d 100.*

The United States Court of Appeals held that the Civil Aeronautics Board had power to deny a petition for an air carrier's certificate, without deciding whether the petitioner was more fit, willing, and able than other applicants, where there was a reasonable basis for questioning the willingness of the applicant to furnish immediate service which public convenience required. *Continental Southern Lines, Inc. v. Civil Aeronautics Board et al. 197 F2d 397.*

The Minnesota commission denied authority to substitute a prepaid for an agency station, even though the annual business was slightly less than \$8,000, and ordered the agency to operate for a short trial period because the loss in business was due to the poor crop conditions in the area and the poor management on the part of former operators of the local grain elevators. *Re Chicago, St. P. M. & O. R. Co. A-7188, September 18, 1952.*

The Wisconsin commission, in authorizing a 6.5 per cent return for a telephone company which operated as a partnership, commented that no allowance would be made for income tax since a partnership is not subject to any income tax. *Re Manawa Teleph. Co. 2-U-3857, October 31, 1952.*



## PUBLIC UTILITIES FORTNIGHTLY

The Missouri commission, in determining whether or not a railway express agency should be discontinued, held that the revenues earned by the agency should be apportioned on a basis somewhat similar to that followed in cases involving the discontinuance of railway stations: one-half of the gross revenues earned on express shipments handled. *Re Railway Express Agency, Inc. (Missouri Division) Case No. 12,202, August 8, 1952.*

The Wisconsin commission authorized increased telephone rates based upon increased wage costs at the various exchanges, rather than an across-the-board proposal, because a general increase would more than offset wage increases at some exchanges and would not cover the cost at other exchanges. *Re General Teleph. Co. 2-U-3879, October 29, 1952.*

The Missouri commission held that a telephone company, under present-day high cost of wages, supplies, repairs, and

maintenance, should not be required to provide free interexchange service, and the fact that such service had existed for years past was no reason for it to continue to exist indefinitely in the future. *Re Middle States Utilities Co. Case No. 10,929, October 17, 1952.*

The New Jersey Department of Public Utilities, although opposed to the establishment of new railroad highway grade crossings, authorized a municipality to construct such a crossing and ordered a railroad to erect and maintain automatic flashing light warning signals, where access to the immediate area was necessary for commercial and industrial development and such crossing was feasible and convenient, where both highway and railroad traffic would be of small volume, and where there was but a slight possibility that the crossing would be considered for grade-crossing elimination. *Re Hackensack, Docket No. 6337, September 24, 1952.*

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*Public Utilities Reports (New Series)* are published in five bound volumes a year, with the PUR Annual (Index). These Reports contain the cases preprinted in the issues of PUBLIC UTILITIES FORTNIGHTLY, as well as additional cases and digests of cases. The volumes are \$7.50 each; the Annual (Index) \$6.00. *Public Utilities Reports* also will subsequently contain in full or abstract form cases referred to in the foregoing pages of "Progress of Regulation."

CONNECTICUT PUBLIC UTILITIES COMMISSION

Re Hartford Electric Light Company

Docket No. 8687

October 10, 1952

**A**PPPLICATION by electric company for authority to increase rates; rate increase prescribed.

*Valuation, § 307 — Working capital — Electric company.*

1. A working capital allowance of forty-five days' operating expense was considered fair and reasonable for an electric company which had a 3-month actual billing system with monthly estimated bills payable at the option of the customer, p. 167.

*Return, § 24 — Attraction of capital — Financing of new construction.*

2. A fair rate of return of an electric company initiating a program to finance necessary construction to meet increased demands for service should be measured by what is needed to attract and maintain a financial structure which appears prima facie reasonable, p. 168.

*Return, § 26 — Cost of capital — Capital structure.*

3. An electric company's financing program which would result in a capital structure consisting of 47 per cent long-term debt, 12 per cent preferred stock, and 41 per cent common stock and surplus, was considered a fair and reasonable basis on which to calculate the company's need of a fair return, p. 168.

*Return, § 27 — Dividend and interest requirements — Cost of capital.*

4. The rate of return which an electric company is permitted to earn is measured not solely by its historical capital costs, but is tempered by the necessity of a reasonable capital structure and the need to maintain a sufficient cushion over dividend and interest payout to ensure reasonable capital costs for future financing and thus preserve the financial integrity of the enterprise, p. 169.

*Return, § 27 — Cost of money to company — Historical cost basis — Current cost basis.*

5. The reasonableness of the rate of return is measured, as one criterion, by the historical and current cost of money for the company, p. 169.

*Return, § 87 — Electric company.*

6. A return of 6.23 per cent was considered sufficient to enable an electric company to finance its necessary additions and improvements to meet the increased demand for service, where debt capital would comprise about 47 per cent of its capitalization; preferred stock 12 per cent; and common stock and surplus about 41 per cent, p. 173.

*Valuation, § 139 — Construction overheads — Interest during construction.*

7. The inclusion of interest during construction in the rate base was deemed consistent with sound rate-making practices for an electric company faced

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with the necessity of financing a construction program necessary to meet the increased demand for service, p. 175.

### *Rates, § 303 — Fuel adjustment clause — Electric company.*

8. The fuel adjustment clause of an electric company's rate schedule should be applied against residential and all commercial classes of customers, since cost of fuel is one of the necessary out-of-pocket costs borne by the company which should be recouped from its customers, p. 175.

### *Rates, § 303 — Fuel adjustment clause — Application to street lighting.*

9. The fuel adjustment clause in an electric company's rate schedule should not be applied to street lighting service, since fuel adjustment is applied to the energy charge only and the energy portion is a minor part of the total charges for street lighting; and since all of the energy is estimated, there is no sufficient basis to authorize the exaction of a fuel adjustment from that business, p. 175.

By the COMMISSION: By a letter of application and schedule of rates and charges filed to become effective July 1, 1952, the Hartford Electric Light Company, a public service company as defined in § 5390 of the General Statutes, Revision of 1949, organized and doing business in the state of Connecticut, hereinafter called the company, seeks authority to increase its existing rates and charges applicable to all customers of the company. The proposed schedule of rates and charges would produce additional revenue of approximately \$1,575,000 per year. The increases are not uniform throughout the several classes of customers but are divided as follows: Residential, including water heating, would be increased by 16.5 per cent, commercial by 10.4 per cent, industrial (Schedule K) by 6.6 per cent, and street lighting by .9 per cent.

Pursuant to § 5409 of the General Statutes, Revision of 1949, the Commission entered upon an investigation of the need for and the reasonableness of the proposed rate schedule and by its order of suspension and notice of hearing, dated May 13, 1952, suspended the operation of the pro-

posed schedule of rates and charges pending its conclusions thereon. For the purpose of this investigation, the Commission assigned the matter for a public hearing at its office in Hartford, on May 26, 1952. Notice of the pendency of the proposed rate increases and of the time and place of the public hearing thereon was given to the company, to the cities and towns affected and to such other parties as the Commission deemed necessary, and by publication in a newspaper having circulation in the area affected. At the time and place set for the hearing, the company appeared by counsel. One protestant appeared pro se but when it was developed that he was not a customer of the company nor affected in any way he took no part in the proceeding. There were no other appearances in opposition or as intervenors.

This application is the first occasion since 1921 that the company has sought a general increase in its rates and charges. During the last thirty years, the company has reduced various schedules of rates and charges, the most recent being in 1946 when commercial and industrial rates were re-

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duced in an aggregate amount of \$600,000 per annum based on the then level of consumption.

The effect of the proposal on residential customers ranges from no increase at a monthly consumption of 14 kilowatt hours or less to 18 per cent at a monthly consumption of 500 kilowatt hours. These rates are based on current costs. Water-heating rates would be increased in the order of 22 per cent.

The effect of the proposed revision of the commercial rate varies considerably because of the wide difference between types of customers on this rate schedule ranging from small one-room offices to large buildings housing entire insurance offices. Generally the better the customers' load factor at any particular demand the lower will be his percentage increase. These increases proposed would vary from 6.3 per cent to 13.0 per cent with an average for all commercial customers of 10.4 per cent. Industrial customers would be affected in a similar manner to that indicated for commercial customers with the range of increase varying from 4.7 per cent to 11.5 per cent, with an over-all average of 7.7 per cent for the industrial class. Existing street lighting customers would be affected only by the inclusion of the proposed fuel adjustment charge resulting in an increase of approximately 9 per cent. New street lighting business would also be affected by higher equipment charges to reflect increases in the cost of certain equipment since the present rates were filed.

The proposal includes a revision in the fuel adjustment base from \$6 to \$10 per net ton. The fuel adjustment would apply to all sales instead of

being restricted to industrial and to some commercial sales as at present. Thus, although the percentage increase in total revenues from the residential class is larger than that to the industrial and commercial classes, and the percentage increase to the commercial class is somewhat larger than that of the industrial class, the difference in the percentage increase is due to the imposition of this fuel-equalizing adjustment for the first time on residential and small commercial users. Of the \$852,000 estimated increases to residential customers, about \$455,000 is requested to equalize the effect of increased fuel costs. Of the \$478,000 estimated increase to commercial customers, about \$130,000 represents the amount requested to equalize the fuel impact and the balance represents an increase of 8 per cent from present base rates.

The company serves the towns and cities of Bloomfield, East Granby, East Hartford, Granby, Hartford, Hartland, Rocky Hill, Simsbury, West Hartford, Wethersfield, and Windsor with a total area served of about 245 square miles and a population of 300,000. The company had approximately 94,175 retail customers in 1951. The demand on the company's system has been increasing steadily since 1939. Although the number of customers has increased during this period, the most striking increase has been in the use per customer. For example, although the number of residential customers have increased 29 per cent in the period 1939-1951, the kilowatt-hour use per customer has increased 73 per cent. The result has been an increase in system peak demands, for example, from 175,600 kilowatts in 1945 to

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253,600 kilowatts in 1951. The company anticipates a steady increase in this tendency and expects that by 1954 peak demand will have increased to 283,000 kilowatts, or 61 per cent over 1945. Because of this steady growth in the load of the company, it has been necessary for it to enlarge its plant, both generating and distributing. This has occurred during a period of steadily rising costs with the result that the dollar value of utility plant used in providing public service has increased much more rapidly than has its generating and distributing capacity. In the period between 1939 and 1954, estimated, for example, although plant capacity will have increased by 94 per cent, the dollar value of the utility plant will have increased by 156 per cent. The company bases its need for rate relief on the allegation that although its customers have increased in number and the use of each customer has increased by an even greater amount the rise in costs of doing business since World War II have offset the increased revenues.

To illustrate, operating revenues have increased from \$14,831,000 in 1947 to \$17,891,000 in 1951 while operating expenses, taxes, and depreciation have increased from \$11,829,000 to \$14,846,000 in the same period. As a result, utility operating income has remained relatively stable, ranging from \$3,002,000 in 1947 to \$3,046,000 in 1951. In other words, in a time when operating revenues were increasing by \$3,060,000, operating income went up only \$44,000. During this same period, the cost of company's total utility plant devoted to public service increased, from \$41,000,000 to \$59,500,000.

Because of the nature of the regulated utility industry, only a small portion of the funds necessary to expand plant comes from internal sources, that is, from reinvestment of accrual for depreciation and the income transferred to surplus. As a consequence, the major proportion of additional funds needed to finance large plant additions must be obtained from investors, and this company is no exception. A self-evident need of sufficient earnings to enable the company to obtain new capital at reasonable terms as needed for expansion does not require elaboration. The question posed for our disposition, however, is what constitutes such sufficient earnings or, as usually termed, a fair rate of return and how best can the company obtain it without discrimination and in fairness to its customers.

### *Rate Base*

The first determination is the rate base or the value of the property which the company has devoted to the public service and on which judicial and economic theory agree that the company is entitled to the fair return just referred to. This is readily determinable for the company. The most important part of this proceeding, however, as it affects the rate base, is the large construction program which the company contemplates in the years 1952, 1953, and 1954. Before including any dollar amount for such construction in our allowance of a rate base, it is necessary first to examine this construction program in detail to determine whether it is in the public interest.

### *A. Construction Program*

The entire construction program

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from January 1, 1952, through December 31, 1954, totals \$22,820,000. Of this total, the new generating station at Middletown, known as Laurel station, makes up \$15,000,000. At the time of the hearing, over \$9,000,000 would be completed in 1952, \$11,000,000 additional in 1953, and the remainder in 1954. Following the hearing, however, the company informed the Commission that because of delays resulting from work stoppages in the steel industry and other causes there would be a reduction in the dollar amount of new plant completed in 1952.

The details of and the necessity for plant expansion have been carefully examined. The transmission and the subtransmission facilities, station, and substation improvements, other distribution facilities, additions, and improvements to South Meadow station, transportation equipment, ordinary line extensions, and miscellaneous expenditures appear in the aggregate to be reasonable and necessary to enable the company to carry out its obligations and meet the steadily growing load on its systems. Since the bulk of the construction program is composed of the new Laurel station, particular attention has been devoted to an inquiry into the necessity for the construction of a plant of this size at this time.

The company's generating capability as of the end of the year 1951 amounted to 265,500 kilowatts. The generating plants of the company are located at South Meadow, Dutch Point, and Tariffville. Of the 265,500 kilowatts of installed capacity, 234,000 is located at South Meadow, 30,000 kilowatts at Dutch Point, and the balance 1,500

kilowatts at Tariffville, the latter being hydro. The newest and most modern of the company's plants is the South Meadow generating station where the oldest turbine was installed in 1921 and the last two units in 1950. Dutch Point on the other hand is only used in the peak winter months and then only when absolutely necessary due to low operating efficiencies. The oldest turbine at this plant was installed in 1911 and the latest in 1918. Due to the low efficiencies at this station and its age, it cannot be relied upon to give the performance necessary to serve economically the company's customers.

The three generating plants of the company are connected with the Connecticut Power Company's relatively small steam and hydroelectric plants. Thus, the total generating capability of the combined Hartford Electric and Connecticut Power Company systems as at the end of 1951 was 277,300 kilowatts. The combined system in turn is tied in with the Western Massachusetts Electric Company through two transmission lines at Agawam, Massachusetts, and with the Central Hudson Gas and Electric Corporation through a transmission line near Falls Village.

From 1945, the end of World War II, to 1951 the company's residential customers increased from 70,115 to 81,479, or about 16 per cent. In the same period the kilowatt-hour use per residential customer increased from about 1,500 to about 2,300 kilowatt hours per year, or approximately 53 per cent. Likewise, from 1945 to 1951 the number of commercial customers has increased from 10,373 to 12,500, or about 21 per cent, and the kilowatt-



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hour use per commercial customer increased from about 10,000 to about 11,500 kilowatt hours per year, or approximately 11½ per cent. Industrial sales of the company in particular have been greatly affected by the defense activity. Largely because of the Korean War, the company's 1950 industrial sales showed an increase of about 40,000,000 kilowatt hours over 1949, and 1951 industrial sales showed a further increase of about 73,000,000 kilowatt hours. In 1952 it is estimated that industrial sales will be more than 50 per cent above the highest level reached during the Second World War, and total estimated industrial

sales in 1954 will be about 70 per cent above such level. Kilowatt-hour sales to other utilities have reduced materially during this period and will be further reduced by the expected cessation of sales to the Western Massachusetts Electric Company in 1953. On a company-wide basis, total kilowatt-hour sales to all customers increased from 1946 to 1951 about 10 per cent, and by 1954 it is estimated kilowatt-hour sales will increase by another 13 per cent.

An analysis of the company's system capability in relation to its actual and estimated future peak demands is tabulated below:

Year	System Capability Kilowatts	Peak Demand Kilowatts	Reserve Capability	
			Kilowatts	%
1945 .....	222,300	175,600	46,700	21
1951 .....	277,300	253,600	23,700	9
1952* .....	277,300	280,000	(2,700)	(1)
1954* .....	343,300 Proposed	283,000	60,300	18

\* Estimated

( ) Indicates deficiency

In order that the company may be ready, as it must, at all times to furnish adequate service to its customers, it should have a gross margin of spare to take care of scheduled maintenance, emergencies, etc., of at least 15 per cent. Therefore, it appears necessary at this time for the company to provide additional capacity to meet the demands of its customers and, at the same time, to give a safe margin to meet all emergencies. To accomplish this objective, the company is installing a 66,000-kilowatt unit at Middletown. The total installed capability of the company's system would then be 343,300 kilowatts. With an estimated

peak demand in 1954 of 283,000 kilowatts, this would give the company a reserve of 60,300 kilowatts, or about 18 per cent. In order to guarantee adequate service at all times to the customers of the company, to provide a reserve for future growth, and, at the same time, to allow a sufficient margin of spare for maintenance and emergencies, this additional capacity is necessary.

We show in a table below the construction program of the company for the years 1952, 1953, and 1954 which will indicate the magnitude of the projects and the estimated expenditures by years:

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TABLE I

Summary of Estimated Cost of Construction Program  
from January 1, 1952 to December 31, 1954

	Total	1952	1953	1954
1. New Generating Station at Middletown .....	\$15,053,000	\$6,416,000	\$8,500,000	\$137,000
2. Transmission and Subtransmission Facilities .....	1,806,000	517,000	725,000	564,000
3. Substation and Substation Improvements .....	1,590,000	330,000	955,000	305,000
4. Other Distribution Facilities ..	1,522,000	806,000	456,000	260,000
5. Additions and Improvements—South Meadow Station .....	420,000	420,000	.....	.....
6. Transportation Equipment ...	130,000	50,000	40,000	40,000
7. Ordinary line extensions, transformers, meters, etc. ....	1,635,000	545,000	545,000	545,000
8. Miscellaneous .....	664,000	264,000	200,000	200,000
Total .....	\$22,820,000	\$9,348,000	\$11,421,000	\$2,051,000

### *B. Conclusions Re Rate Base*

We show below, in Table II, the rate base of the company as of December 31, 1952, which makes provision for work under construction and that portion of the construction program above described which will be completed by December 31, 1952, including an allowance for materials and supplies, fuel expense, and working capital less contributions in aid of construction and the depreciation reserve:

TABLE II  
Rate Base  
(December 31, 1952)

Utility Plant .....	\$68,551,000
Less: Contributions .....	(129,000)
Plus: Materials and Supplies .....	1,000,000
Fuel Reserve .....	2,308,000
Working Capital .....	1,467,000
Gross Utility Plant .....	73,197,000
Less: Depreciation Reserve ..	(13,767,000)
Net Utility Plant .....	\$59,430,000

monthly estimated bills payable at the option of the customer. The allowance of forty-five days seems, under the circumstances of this proceeding, a fair and reasonable estimate.

An allowance of \$2,308,000 for fuel expense in 1952 is sought based on a 120 days' supply of fuel normally kept at hand. This amount represents the cost of oil and coal in storage and allows a sufficient margin of safety to take care of emergencies which might be created as a result of transportation difficulties or shortages resulting from the unsettled fuel markets. There is also included a provision for materials and supplies amounting to \$1,000,000 based on actual inventory. These estimates do not appear out of line and we find that an allowance of \$3,308,000 for fuel expense and materials and supplies is no more than just and fair.

We turn now to the question of fixing a return on this rate base.

### *Rate of Return*

The precise percentage rate which will enable the company to obtain the generally recognized standard of at-

[1] A provision for forty-five days' operating expenses as a measure of working capital was requested by the company. This is based on the 3-month actual billing system under which most customers are billed with

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tracting new capital on fair terms defies all but the most careful analysis. Such an examination of the evidence in this proceeding has been made and studies completed. We have considered the capital structure of the company, both present and prospective, to determine if it is a reasonably sound one for rate-making purposes. We have assumed that the company must be able at all times to meet its contractual obligations on its existing debt and preferred securities, and have sufficient earnings available for the common stock, both present and prospective, to enable it to keep its financing costs at the lowest level consistent with a fair and reasonable rate structure. Since the obtaining of common stock money is the acid test of the adequacy of a utility's earnings, particular attention is devoted to this aspect. It would be a misdirected public service, however, if the financing costs were kept at an extremely low level only by the exaction of rates so high or by the maintenance of a capital structure so imbalanced as to be in itself an unfair burden. To strike this balance, we will have to examine carefully all the elements which we conceive to influence the financial integrity of the company and to value them objectively.

The first question which concerns us is the amount of financing which the company anticipates in the reasonably immediate future to permit it to expand its plant. This determination is fundamental since in the case of the company its capitalization has been changing gradually since 1937 from all capital stock, to bonds, preferred stock, and common stock. Such a development naturally has a pronounced effect upon

the earnings required to keep its securities readily marketable. We have already examined the extent of and the necessity for the construction program in the immediate future and have found it to be in the public interest.

### *A. Financing Program*

[2, 3] In order to finance the major construction program which we have found necessary above, the company proposes to issue and sell \$20,000,000 in securities. At the time of the hearing, the company indicated that it was not committed to any particular form of financing but particular emphasis was attached to the possibility of issuing \$20,000,000 in bonds. Following the hearing, the company indicated to the Commission that its plans have changed and that it now plans the issuance of only \$15,000,000 in bonds in 1952 with the balance of \$5,000,000 to be raised in 1953 or later. Although this proceeding is not a finance docket in which the financial structure is specifically before us, our responsibility, as we conceive it, is sufficiently broad that at this stage a fair rate of return should be measured by what is needed to attract and maintain a financial structure which appears *prima facie* at least not unreasonable. As previously mentioned, the company's capitalization has changed since 1937, at which time it was 100 per cent common capital stock, and at the time of the hearing, consisted of 33 per cent long-term debt, 15 per cent preferred and 52 per cent common capital stock and surplus. If \$20,000,000 were to be obtained by the sale of debentures, the capitalization of the company would consist of 50 per cent long-term debt, 11 per cent preferred stock, 39 per cent common stock and surplus. If \$15,-

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000,000 were obtained by the sale of debentures and \$5,000,000 to the sale of preferred stock, the ratios would be 43 per cent long-term debt, 18 per cent preferred stock, and 39 per cent common stock and surplus. If \$15,000,000 were obtained by the sale of debentures and \$5,000,000 by the sale of common capital stock, the ratios would be 43 per cent long-term debt, 11 per cent preferred stock and 46 per cent common stock and surplus. These figures are approximately comparable with the capital structure maintained by the industry as a whole as disclosed from evidence submitted by witness for the company.

Examination of combined capitalization of all class A and B electric utilities as compiled by the Federal Power Commission shows that ratios at the end of 1950 were approximately 49 per cent long-term debt, 14 per cent preferred, and 37 per cent common capital stock and surplus. This proportion is almost constant in the preceding thirteen years which is as far as the data go. A comparison with this over-all average shows that the company's prospective capital structure is roughly in line with the industry, particularly if \$20,000,000 is financed with the sale of debentures. We find, therefore, that the prospective financing program will result in a capital structure which is prima facie at least and for rate-making purposes only, a fair and reasonable basis on which to calculate the company's need of a fair return. This conclusion, of course, in no way constitutes an approval or disapproval of any specific application for authority to issue any securities which may be made in the future by the company but is restricted

to the purposes of determining the capitalization of the company in the reasonably immediate future to support which it must show sufficient earnings to maintain investor confidence.

### *B. Cost of Money*

[4, 5] The utility operating income which for a utility would be a fair return has been considered by the Commission from several points of view. Consistent in these approaches, however, has been the desire and purpose that the company's revenues be no higher than the minimum required to meet operating expenses, including taxes and depreciation, pay its contractual obligations on its debt, and the dividend requirements on its preferred and common stock. The rate at which the company is permitted to earn, however, is measured not solely by its historical capital costs, but is tempered by the necessity of a reasonable capital structure and the need to maintain a sufficient cushion over dividend and interest payout to ensure reasonable capital cost for future financing and thus preserve the financial integrity of the enterprise.

This factor is usually considered as the cost of money. In this proceeding it becomes particularly important since between December 31, 1951, and December 31, 1954, the company will have to attract sufficient capital to enable it to expand its plant by about 36 per cent as related to the rate base. It is our duty to ensure that the cost of this financing be kept at as low a level as possible, just as every other cost which is borne by the company. "Where the financing has been proper, the cost to the utility of the capital, required to construct, equip, and operate

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its plant, should measure the rate of return which the Constitution guarantees an opportunity to earn." *Missouri ex rel. Southwestern Bell Teleph. Co. v. Public Service Commission*, 262 US 276, 306, 67 L ed 981, PUR1923C 193, 214, 43 S Ct 544, 31 ALR 807 (Brandeis, J., concurring).

We will determine the dollar amount of utility operating income required for this purpose by an examination of the cost of money on a percentage basis. This does not, of course, mean the rates are being fixed on a basis of a return on invested capital. Rather, the reasonableness of the rate of return on the rate base hereinafter found by the Commission is measured, as one criterion, by the historical and current cost of money for the company.

### (i) *Cost of Debt Capital*

In reaching his conclusions respecting the composite rate at which the company must earn on its total invested capital, witness first analyzed the debt structure of the company. It was determined that \$17,670,000 was already outstanding on which the interest rate was 2.79 per cent. Although an allowance for efficiency in management was urged, we see no reason for recognizing a rate of interest higher than 2.79 per cent actually being paid by the company as a measure of the historical cost of debt capital.

It was originally proposed to issue \$20,000,000 in additional debt securities. Subsequent to the hearing, as mentioned above, the company informed the Commission of its purpose to issue \$15,000,000 in debt securities. The interest rate at which the company can reasonably expect to market debt securities with a capitalization which would result from an additional

\$20,000,000 bond issue are estimated by the company's witness at 3½ per cent. The company's financial rating is still high and it has experienced in past years marked success in financing at low cost. Since the estimates reached by the company's witness are based on an average of all issues over a reasonably comparable period, it fails to allow for a company, such as Hartford, which is possibly in the lower range of the average. We feel that the company's favorable past financial record, the adequate coverage of its present interest and the lower cost of money currently prevailing indicate that the cost to the company of prospective debt capital would be less than 3½ per cent. For these reasons and because the averages used by company's witness do not include privately negotiated issues, we feel it reasonable to assume the cost of new bond money to the company will not be above 3½ per cent.

On the basis, therefore, of the presently outstanding bonds in the amount of \$17,670,000 at 2.79 per cent and \$15,000,000 at 3.25 per cent, the composite rate on debt capital is reduced to 3 per cent.

### (ii) *Cost of Preferred Capital*

Analysis of the evidence submitted by the company's witness indicates that the company has been fortunate in the rates at which it was able to attract preferred stock money in the past. Witness for the company contrasts this rate with the average preferred offerings at the time the company sold its issue, that is, for a period ranging from June 1, 1949, through December 31, 1949. During that period, none of the seventeen other companies which marketed preferred stock

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sold it on a lower-yield basis than the company. Witness concludes that despite this experience in the past, the company will no longer be able to finance on as favorable terms but, because of the change in capital structure, will be required to pay dividends at a rate higher than the present average of preferred stock issues sold publicly from April 1, 1951, through March 31, 1952, which was 4.47 per cent for companies whose bonds are rated double A or triple A. The average for all companies was 4.66 per cent in this period. From this, witness concludes 4.5 per cent would be a fair average. Since, however, the average dampens the effect of companies whose financial standing is as high as this company, and since the last preferred issue sold at .53 per cent below the market average and .31 per cent below the average of all companies whose principal bond issues were rated double A or triple A, we feel that there is no reason the rate at which preferred stock can be sold cannot be at least as low as the average for all companies whose bond issues are rated double A or triple A. A composite rate of interest based on \$8,000,000 at 3.9 per cent and \$5,000,000 at no higher than 4.47 per cent, or a composite rate of at most 4.12 per cent, appears reasonable.

### (iii) *Cost of Common Stock Money*

To determine the composite cost of common stock money, witness has largely confined himself to the current cost of equity money. He applies this resultant percentage to all common and surplus on the sound theory that it would be impossible to isolate newly acquired capital from outstanding common stock and pay to the

former one rate of dividends and to the latter another.

The return which the company must earn on its capital stock money was measured by the price the witness determined investors would be likely to pay for the dividends and earnings of the company's common stock based on market conditions prevailing currently and in recent years but with the capital structure which Hartford in all probability will have in the future. Witness then deducted the necessary costs incurred in raising common capital stock, that is, the difference between the going market price with no common sale imminent and the net proceeds to the company from a new offering of common. This seems proper since what the company would receive from a sale of common stock is not the number of shares times the price sold but rather that figure less the costs of financing and, therefore, in determining what the company will have to pay for its common stock money, it must sell enough shares so that the resultant proceeds will equal what it needs in money and the cost to the company will be the dividends on that gross number of shares.

An analysis was made with a view to reaching a conclusion on these factors which will be discussed immediately following. Because so many of the conclusions represent a judgment factor which is difficult, if not impossible, accurately to identify in terms of fractional percentage points, no effort will be made in the following discussion specifically to distinguish where, in our judgment, it varies by such fractional percentage points. Rather the areas in which our conclusions differ will be identified and effect



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will be given in the over-all computation of the cost of common stock money to the company.

Witness reaches a conclusion on what the dividend of the company's common will be appraised in the future by investors if adequately protected by earnings through a comparison with similar companies having comparable sales characteristics and gross revenues, and witness determined, on the basis of these factors chiefly, that the typical average utility in the company's bracket experienced a dividend price ratio on December 31, 1950, of 6.9 per cent and an earnings price ratio of 9.6 per cent. He concludes that the company will thus be appraised on a 6½ per cent yield basis.

We feel that the use of an average in this particular manner is not wholly representative since the investor is not buying an average stock but is buying a specific stock, namely, common shares of the company. As such many factors, peculiar to the company, not considered by witness, should be examined. These include the reputation of the company locally, the question of competition, the percentage of saturation of the potential market, the stability of the return from certain portions of the company's business, for example, the unusually stable commercial revenues of the company, and the nature of the area served, whether rural or urban, for example. Sufficient attention was not given in our opinion also, to the present dividend market price ratio of 5.9 per cent even though in a fairly thin market. These factors we feel would react favorably to the company and in our judgment tend to reduce the percentage at which witness

computes investor's appraisal of the company.

The required earnings price ratio which is calculated from a determination of the dividend payout, which witness claims would be required to support investor confidence at the level of 6½ per cent, was based on the average of electric utilities having comparable gross earnings and sales characteristics as the company. Witness claimed 8.7 per cent was a fair estimate of this value. We feel this average determination should not be conclusive. Witness also stresses the adverse effects resulting from the thinner equity now accruing to the common shareholder as the capitalization of the company changed since 1937. While this factor undoubtedly has adverse effects, leverage is an advantage as well and is so considered by investors. From the above, we feel that an earnings-market price ratio of 8.7 per cent is a high estimate.

Since certain effects must be provided for resulting from a reduction in price of the present share value of the common stock when a new issue is sold, provision must be made for such a reduction, sometimes referred to as underpricing. After making an effort to isolate these factors and measure them, witness concludes that a 10 per cent discount is a reasonable estimate of the effects the cost of financing will have on the amount of money the company will get from the sale of a number of shares under what it would get if no sale were imminent. This results in a cost of money to the company of 9.7 per cent instead of 8.7 per cent. This percentage of discount seems a reasonable calculation based on the evidence and comparable to is-

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sues by other companies similarly situated. To this witness adds a percentage to bring the composite cost to 10 per cent.

Depending on the underpricing and payout used, and considering a yield to the investor lower than claimed by the company, we find that reasonable cost of the equity component for rate-making purposes at this time is no higher than 8.5 per cent.

[6] In the last analysis, the cost of capital cannot be determined with absolute accuracy, it is a matter of judgment. We find that over the foreseeable future the company can reasonably finance its necessary additions and improvements and can obtain a reasonable return on its property with a return of \$3,700,000, or about 6.23 per cent on the rate base at the end of 1952 when debt capital will comprise about 47 per cent of the company's capitalization, preferred 12 per cent, and common stock and surplus about 41 per cent.

We find, therefore, that on the basis of proposed rates in effect for the entire year 1952 and with the proposed capitalization for the entire year 1952, rates sufficient to yield utility operating income of about \$3,700,000 are no more than just and reasonable.

### *Experience under Present Rates*

We now turn our attention to a consideration of the company's experience with a view to determining whether the utility operating income found reasonable above is in fact being earned by the company.

The company claims certain operating deductions in its evidence and testimony and submitted income statements for the year 1951 and the estimated years 1952, 1953, and 1954. The im-

pact of the reduction in utility operating income, despite additional revenues, is illustrated by an examination of the year 1951. In that year despite a record peak of power sold and revenues obtained, the company experienced increases in operating expenses to such an extent that its utility operating income of \$3,046,000 provided sufficient funds to pay interest and dividends with a margin to transfer to surplus of only \$79,000. In the year 1952, the company expects that its experience will be even less favorable and, from information submitted during and after the hearing, it appears that the company will fail to meet its dividend requirements out of current earnings by \$165,000.

During 1952, under the impact of rising costs and of other factors adversely affecting the utility income of the company, the return on the end of year rate base under present rates, assuming \$15,000,000 in bonds outstanding, and including \$35,000 interest charged construction would amount to \$2,968,000 or 4.99 per cent. It appears, therefore, that the present rates charged by the company are earning less than a fair return, providing the operating expenses submitted by the company constitute fair allowances for rate-making purposes.

The operating expenses claimed by the company have been carefully examined. The largest single item of expenses for an electric utility is fuel expense. Increases in this item of expense are to a large extent recovered directly through the fuel adjustment clause which is presently effective on industrial rates and partially effective on commercial rates. The proposal of the company, it should be pointed out

## CONNECTICUT PUBLIC UTILITIES COMMISSION

again at this time, would make the revised fuel adjustment clause applicable to all classes of the company's customers. Transmission line expenses, however, need special mention. Prior to 1952, these expenses were relatively small due to the company's minor investments in transmission lines. Early in 1952 the transmission facilities used by the company to serve its East Hartford-Glastonbury load were considerably enlarged by the addition of a new 115-kilovolt transmission line necessary to improve the service characteristics of its load in that area. As a result, transmission line expenses have increased substantially over 1951. The Commission has examined these increased operating expenses and finds them fair and reasonable.

Inextricably bound up with the company's need for additional revenues is the construction of the new Laurel station discussed in detail above under Construction Program. This feature of the company's case is important for two reasons. In the first place, the need for the large amounts of additional capital presently confronting the company is brought about largely by the necessity of building this station. It, therefore, represents in a large measure the extra burden in the form of carrying charges on capital which must be serviced by the company. Since it has been shown above to be necessary and a proper discharge of the company's responsibility to construct such a plant, however, our estimates of the company's need for revenue for the current year and for the immediate future must take into account the necessity for this additional money.

It is important for a second reason, 95 PUR NS

however, not in our opinion, sufficiently stressed by the company. That is, a new plant of the magnitude and efficiency of the new Laurel station will materially improve the over-all efficiency of the company's system. This fact is given recognition in one place in the company's exhibits, at least, where fuel expense is estimated to decline from a high of \$6,925,000 in 1952 to \$6,196,000 in 1954, despite an estimated increase in estimated kilowatt hours sold of 6,320,000 during the same period. The favorable effect of the new plant is also illustrated by an examination of the cost per kilowatt hour sold estimated by the company for the years 1952, 1953, and 1954. Despite an increase of .61 mills in 1953 over 1952, there is an increase of only .03 mills per kilowatt hour in 1954 over 1953. It is significant that the new Laurel station will not become operative until late 1953 or early 1954. It was the testimony of the company's witness that only fifty new employees will be needed at Laurel station and that labor, which reflects the impact of inflation in many industries, has gone up only 16 per cent per kilowatt hour between 1939 and 1951 for the company. Moreover, many of the largest items of cost entailed in the construction of a large steam-generating station will have already been incurred by the time the first 66,000-kilowatt unit is installed at Laurel station. Land costs, most of the engineering costs, dock sites and fuel handling equipment, getaway transmission facilities, and other items will not have to be duplicated but merely supplemented or, if duplicated, can be built at considerably lower unit costs excepting, of course, for increases

## RE HARTFORD ELECTRIC LIGHT CO.

in costs of materials. Thus the cost of \$227 per kilowatt estimated to be the cost for the new Laurel station should be relatively lower in the future as additional plant is constructed and with the construction of additional units the over-all efficiency of the company's system will be materially improved. We feel, therefore, that many facts urged on the Commission by the company in support of its need for rate relief are a result of the coincidence in the year 1952 of high operating expenses and high financing costs attendant on major expansion at a time when the company stands on the threshold of using newer, more efficient, and more economical generating facilities.

Since the effects of this observation, however, are speculative at best, no effort has been made in terms of dollar allowances for rate-making purposes to provide for them due in part at least to the inflationary nature of the current economy. They do, however, militate against a provision for additional return for the company as a kind of bonus insulation against inflation. For the purposes of this proceeding, we find that the operating expenses submitted by the company are fair and reasonable for rate-making purposes.

[7] We have included in our calculation, however, a provision for interest charged during construction. We feel that this is consistent with sound rate-making practices, for this company at least, and have made provision for it in calculating revenues required by the company.

### *Experience under Proposed Rates*

The company submitted bill analyses summarizing the estimated effects of the proposed rates on the several

classes of customers in support of the estimated revenues which would accrue under the proposed schedule. These analyses have been carefully examined by the Commission and its staff with a view to determining the accuracy of the underlying methods and the calculations. The conclusions reached by the company appear accurate as a result of this careful examination. We find, therefore, that the rates as proposed by the company are reasonably calculated to yield the dollar revenues submitted in evidence and shown in our table below. [Table III omitted herein.]

Our estimate of the results of the company's operations in 1952, under the rates proposed with the minor adjustment described below, indicates that the company would earn \$3,707,000, including \$35,000 interest charged construction. This dollar amount would result in a rate of return on net rate base at the end of 1952 of 6.24 per cent.

We find the rates as filed with the minor adjustment described below will enable the company to meet its reasonable operating expenses, including depreciation and taxes, its interest charges on its debt, meet reasonable dividend requirements on its equity capital with sufficient remaining to assure the company's obtaining additional capital on the most reasonable terms consistent with a sound rate structure and are, therefore, no more than just and reasonable.

We show in Table III, income statements of the company for 1951 and 1952, with present and proposed rates, as adjusted. [Table omitted herein.]

### *Rate Schedule*

[8, 9] Contained in the schedule of

## CONNECTICUT PUBLIC UTILITIES COMMISSION

rates and charges is a provision for the imposition of a fuel adjustment charge on all classes of customers including residential customers and those commercial customers who do not already bear such a charge. Included is the increase in the base rate of fuel from \$5 to \$10 per net ton. The details and the effects of this provision are described at the outset of this finding.

It appears that the cost of fuel is one of the necessary out-of-pocket costs borne by the company which should be recouped from its customers. The function of the fuel adjustment clause is to permit the rates of the utility involved to follow more closely the rise and fall in the cost of fuel. This principle has been recognized by the Commission in its Docket 7417, June 13, 1944, 54 PUR NS 57, in which a uniform fuel adjustment clause was prescribed and in previous proceedings (Docket 8168, Re Connecticut Light & P. Co. Jan. 28, 1949) and appears to be properly chargeable against residential and all commercial classes of customers as well as against those currently affected. We find, therefore, that this feature of the com-

pany's rate schedule should be approved.

A provision is contained, however, for the imposition of a fuel adjustment charge on street lighting also. Fuel adjustment is applied to the energy charge only. Since the energy portion is a minor part of the total charges for street lighting, and since all of the energy is estimated, we feel that there is not sufficient basis in this proceeding and under these circumstances to authorize the exaction of a fuel adjustment from street lighting business. That feature of the company's rate structure is, therefore, disapproved.

During the time in which this matter was before the Commission for its consideration, the company submitted a motion to correct certain errors in the transcript of testimony. These corrections have been carefully examined and compared with prepared testimony, exhibits, and other primary sources. They appear reasonable and do not in any case affect adversely the testimony which they purport to correct. The motion to correct is, therefore, granted in the form in which it was submitted by the company.

MICHIGAN PUBLIC SERVICE COMMISSION

## Re Michigan Consolidated Gas Company

D-3430-52.3

July 28, 1952

**A**PPPLICATION for authority to increase natural gas rates; decision postponed pending submission of operating results and depreciation study.

*Rates, § 380 — Gas — Increase to cover higher wholesale price of gas.*

1. A gas company should not be permitted to increase its space-heating rate in the same proportion as the wholesale cost of gas is increased by its supplier where inequities in the existing rate structure would be perpetuated if the increased costs were simply superimposed on the existing rates, but the increased revenue need should be secured by the apportionment of the increased cost to the corrected rates, p. 178.

*Discrimination, § 17 — Purpose of rate adjustment — Elimination of inequity.*

2. Any necessary rate adjustment should have as one of its purposes the reduction or removal of inequalities or inequities appearing in the price structure wherever possible, p. 178.

*Revenues, § 1 — Effect of increased costs.*

3. The effect of increased costs upon utility revenues can best be measured by actual experience with such costs, p. 178.

By the COMMISSION: Michigan Consolidated Gas Company, hereinafter called Consolidated, filed an application December 26, 1951, seeking authority to increase certain of its natural gas rates approximately \$7,000,000 annually. During hearing on the application, which commenced January 22, 1952, it developed that certain of Consolidated's service areas subject to our jurisdiction had not been included in the application. Hence, by our order of February 27, 1952, 92 PUR NS 129, we held that the application should be amended to include these areas. Such amendment was made and hearings on the amended application concluded May 14, 1952.

Consolidated purchases its natural

gas from two pipeline suppliers, Michigan-Wisconsin Pipe Line Company and Panhandle Eastern Pipe Line Company. Both of these pipelines have applications pending before the Federal Power Commission requesting increases in their wholesale price of gas to Consolidated, and the requested increases are being collected from Consolidated pursuant to bonds guaranteeing repayment by the pipelines of any portion of the increase not finally approved by the Federal Power Commission. This has resulted in the cost of gas purchased by Consolidated from Michigan-Wisconsin being increased 3.5 cents per thousand cubic feet and from Panhandle 10½ cents per thousand cubic feet.



## MICHIGAN PUBLIC SERVICE COMMISSION

[1, 2] It was the position of Consolidated that its existing rates for space-heating customers covered by the application should be increased in the same proportion that the wholesale cost of gas to it had been increased. The Commission staff on the other hand contended that Consolidated's existing rate structure contained certain inequalities which would be perpetuated if the increased costs were simply superimposed on the existing rates. Instead, the staff proposed that certain uniform rates designed to remove inequities in Consolidated's existing rate structure be established and that any increased revenues needed by Consolidated be secured by apportionment of increased costs to the revised rates.

There is merit in the staff's position in this matter. In our order of June 5, 1952, dealing with the application of Michigan Bell Telephone Company, we held that: "When adjustment of rates becomes necessary, such adjustment should have as one of its purposes the reduction or removal of inequalities or inequities appearing in the price structure wherever possible." Re Michigan Bell Teleph. Co. Docket T-252-52.13, p. 12. This principle is applicable here and we therefore approve the position of the staff.

At this point, however, we are met by certain deficiencies in the present record. A staff witness testified that staff work on Consolidated's depreciation accrual indicated that a study should be made to determine if rates used to arrive at the depreciation accrual are proper and if the depreciation reserve is adequate. We do not understand this testimony to mean

that Consolidated's depreciation rates are too high, in fact they may be low in some categories. Rather, we understand simply that the staff lacks the detailed information necessary to permit an evaluation of the depreciation rates in terms of the service life of the property.

We are sure that this situation has developed through inadvertence rather than deliberate design; however, it should be corrected, and it can be in the instant proceeding without any substantial detriment to Consolidated.

[3] Also in the hearing the city of Detroit based its presentation on operating results for the calendar year 1951, while Consolidated and the Commission staff used estimated results for the calendar year 1952. Consolidated serves approximately 732,000 customers in seven service districts and we do not believe that either of the above test periods furnishes a firm foundation for the rate adjustments we propose.

In Re Michigan Bell Teleph. Co. (1951) Docket T-252-51.19, 91 PUR NS 129, we held that the effect of increased costs on revenues could best be measured by actual experience with such costs. Applying that principle to this proceeding we find that ultimate decision herein should be based on Consolidated's actual operating results for the year ending September 30, 1952. Such a test period will accurately reflect the effect of increased costs on revenues and provide a solid base for rate adjustment.

Therefore, it is *ordered*:

1. That Michigan Consolidated Gas Company immediately institute a depreciation study to ascertain the rea-

RE MICHIGAN CONSOLIDATED GAS CO.

sonableness of the rates used to determine its depreciation accrual.

2. That further hearing herein be held on October 7, 1952, commencing at 9:30 A. M. (Eastern Standard Time), at this Commission's offices in Lansing, Michigan, for the purpose of submitting at said hearing the results of the study and actual operating results and balance sheet for the 12-

month period ending September 30, 1952.

3. That this Commission's Order No. D-3430-52.1, dated February 27, 1952, and hereinbefore referred to, be and the same is hereby corrected for a typographical error occurring on page 4, line fifteen, by changing the word "improvement" to "improvident."

WISCONSIN PUBLIC SERVICE COMMISSION

S. J. Peplinski et al.

v.

Wisconsin-Michigan Power Company

2-U-3804

September 23, 1952

**C**OMPLAINT against electric company by customers and residents of village for substitution of monthly for bimonthly meter readings; granted.

*Payment, \$ 20 — Substitution of monthly for bimonthly meter reading and billing — Urban areas — Savings.*

Substitution of monthly for bimonthly electric meter reading for urban customers was ordered where customers were not far apart and cars were not used for meter readings, few savings in such an area could be obtained, and there was a density of commercial customers, offering the maximum possibility of errors.

By the COMMISSION: On April 10, 1952, C. J. Peplinski and forty-three other residents of the village of Pulaski, Brown county, filed a complaint with the Commission objecting to bimonthly reading of electric meters. The petition reads as follows:

"We the undersigned residents of the village of Pulaski, Wisconsin, are hereby petitioning you to instruct the

Wisconsin-Michigan Power Company, of Appleton, Wisconsin, to read the electric meters every month and not every other month, as is done presently. This present system of reading meters is unfair and does not give us an accurate monthly electric bill."

APPEARANCES: S. J. Peplinski and others, by Edward Lontkowski, At-

## WISCONSIN PUBLIC SERVICE COMMISSION

torney; Wisconsin-Michigan Power Company, by Van B. Wake.

Of the Commission staff: C. F. Riederer, engineering department, and R. E. Purucker, engineering department.

### *Findings of Evidentiary Facts*

The Commission finds the essential evidentiary facts herein to be as follows:

The Wisconsin-Michigan Power Company as an electric public utility serves in one area generally centered at Appleton and in another area in northeastern Wisconsin.

In a letter dated March 17, 1942, this Commission authorized the Wisconsin-Michigan Power Company to render estimated bills to customers in six rural areas for intervening months between quarterly meter readings. This authorization was given because of the utility's desire to comply with Federal agencies' requests to save automobile tires and gasoline. This Commission's general order 2-U-911 ([1950] 85 PUR NS 97) requires authorization before the inauguration of such a program. The March 17, 1942, authorization contained the condition that monthly reading should be retained where excessive automobile mileage was not incurred.

On July 15, 1942, the quarterly meter-reading plan was extended to all rural territory, but the same condition listed above was retained.

The quarterly billing practice continued until sometime after January 28, 1946, when the Wisconsin-Michigan Power Company notified the Commission that it was changing its quarterly reading plan to a bimonthly plan. The correspondence when this change

95 PUR NS

was made also referred to rural territory.

Meters in the village of Pulaski were being read on a bimonthly basis, and there were other urban communities where bimonthly meter reading was used.

The chief complaint at Pulaski appeared to be against the size of the estimated bills. The testimony showed that there were instances where the estimated use was in excess of two months' actual use, requiring credits to be given at the end of the second month. It appeared that most complaints concerning the estimates involved commercial customers where monthly consumptions are more variable than farm and residential consumption.

There are many questions in customers' minds concerning estimated bills. In some instances commercial customers have had difficulty explaining the variable bills from month to month to those in their organization who pay the bills. The procedure follows in estimating and checking estimated bills materially reduces the saving in meter reading under a system of bimonthly billing, especially in urban areas where automobiles are not necessary. The greatest difficulty experienced is with respect to commercial billing.

### *Opinion*

It is the Commission's opinion from a study of the evidence that extended meter-reading plans offer the least possibility of savings in urban communities because customers are not far apart and cars are not used by meter readers; that such extended readings in urban communities where there is the great-

## PEPLINSKI v. WISCONSIN-MICHIGAN POWER CO.

est density of commercial customers offer the maximum possibility of errors.

### *Findings of Ultimate Fact*

The Commission finds:

That it is unreasonable for the Wisconsin-Michigan Power Company to read meters bimonthly in incorporated villages and cities or in unincorporated areas of like characteristics.

### *Conclusion of Law*

The Commission concludes:

That the Wisconsin-Michigan Power Company as an electric public utility is following an unreasonable practice in using bimonthly meter reading in incorporated villages and cities and that this Commission has been given the power under §§ 196.02, 196.03, 196.26, and 196.37, Statutes, to investigate complaints and order changes in utility practices. That the Commission has jurisdiction to re-

quire Wisconsin-Michigan Power Company to discontinue its present practice of bimonthly meter reading in incorporated cities or villages or in areas of like characteristics and to require it to read meters at the end of each billing period in such areas and that such an order should be entered.

### ORDER

The Commission therefore orders:

That the Wisconsin-Michigan Power Company as an electric public utility discontinue its present practice of reading meters bimonthly in cities and villages and incorporated areas of like characteristics and shall schedule the reading of all electric meters at the end of each billing period in all incorporated villages and cities or in unincorporated areas of like characteristics. Such scheduled readings shall begin not later than the first of the month following twenty days after the date of this order.

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### FEDERAL POWER COMMISSION

## Re Niagara Mohawk Power Corporation, As Successor Licensee to The Niagara Falls Power Company

Opinion No. 237, Docket No. E-6264  
October 3, 1952

**A**PPPLICATION for approval of accounting disposition of amount representing payment in connection with termination of certain power contracts by charges to operating expenses over a period of years; denied.

*Discrimination, § 104 — Electric company — Charge for mechanical power.*

1. A charge by an electric company for mechanical horsepower delivered by

## FEDERAL POWER COMMISSION

hydraulic turbines to direct current generators owned and operated by an industrial company, all located in the utility's station, is discriminatory when the contract rate for such power is fixed at \$8 per mechanical horsepower per year, which is one-half the rate of \$16 per mechanical horsepower per year, the equivalent of the rate of \$23 per kilowatt per year that other customers pay for electric energy, it appearing that when stated in terms of electric energy produced the utility actually receives only 1½ mills per kilowatt hour for the energy as compared with 3 mills per kilowatt hour received from electric customers, p. 184.

### *Public utilities, § 73 — Status of mechanical power — Sale on electric utility's premises.*

2. The sale of mechanical horsepower delivered by hydraulic turbines of an electric utility to direct current generators owned and operated by an industrial company, all located in the utility's plant, constitutes public service subject to regulation by the Federal Power Commission; the meaning of "public service" includes sales to industrials and the place where title passes is immaterial, p. 185.

### *Rates, § 13.4 — Jurisdiction of Federal Power Commission — Sale of mechanical power to industry — Absence of state regulation.*

3. The Federal Power Commission, under § 19 of the Federal Power Act, 16 USCA § 812, has jurisdiction over charges by an electric company, which is a licensee under the act, for mechanical power delivered under contract by the utility's hydraulic turbines to direct current generators owned and operated by the industrial company where the electric company not only makes sales to other industrials but sells energy to another electric company for sale to residential consumers, as well as to commercial and industrial customers and other utilities, p. 185.

### *Discrimination, § 50 — Payment to end contract — Failure to invoke Commission jurisdiction.*

4. An electric company cannot sustain its claim that a payment to an industrial company was necessary to relieve it of the burden of contracts providing for service at discriminatory rates when it has made no attempt to invoke the jurisdiction of the Federal Power Commission to correct the discrimination, p. 185.

### *Rates, § 13.1 — Jurisdiction of Federal Power Commission — Contracts.*

5. Contractual provisions do not prevent rate regulation by the Federal Power Commission, p. 185.

### *Rates, § 214 — Contracts — Payment for termination.*

6. A power company does not sustain its burden of proof that the amount paid to an industrial company for termination of a contract for service at a discriminatory rate was reasonable when the utility has failed to avail itself of factors extant at the time of the negotiations which, if used, might have given the utility company a bargaining advantage, apart from the question of whether any such payment at all was necessary, p. 186.

### *Accounting, § 12.1 — Cost of terminating contract — Amortization.*

7. The amount paid by an electric company to an industrial company to terminate unprofitable contracts for the sale of mechanical power constitutes a loss incurred at the time the payment is made and is not the payment of an asset of new business which may be charged to operating expenses in the future; and the expenditure should be charged off to earned surplus, p. 187.

## RE NIAGARA MOHAWK POWER CORP.

**APPEARANCES:** Lauman Martin, for Niagara Mohawk Power Corporation, Applicant; Howard E. Wahrenbrock, Reuben Goldberg, Francis L. Hall, and Theodore French, for Staff of the Federal Power Commission.

By the COMMISSION: This is a proceeding on an application by Niagara Mohawk Power Corporation (Mohawk), successor in interest to the Niagara Falls Power Company (Niagara), for Commission approval of an accounting disposition of the amount of \$1,500,000 in Account 146, Other Deferred Debits, representing a payment made to Aluminum Company of America (ALCOA), in connection with the termination of certain power contracts, by charges to operating expenses over a period of years.

The power contracts were five in number, executed from 1895 to 1922, and provided for the lease to ALCOA of nonproject land at an annual rental of \$4,700 and for the purchase by ALCOA of a total of 52,000 mechanical horsepower at \$8 per mechanical horsepower or \$416,000 per year. The mechanical power was delivered by five of Niagara's hydraulic turbines to direct current generators owned and operated by ALCOA, all in Niagara's Schoellkopf station 3A. The output of the generators was transmitted to ALCOA's plant immediately adjacent to the powerhouse.

On March 7, 1947, Niagara and ALCOA entered into an executory agreement providing for the cancellation, as of March 1, 1949, of the five power contracts. Upon the latter date Niagara's service to ALCOA ceased and shortly thereafter the direct current generators were removed from the

Schoellkopf station. In their place Niagara installed five alternating current, 60-cycle generators, at a cost of \$2,574,435, having an aggregate rated capacity of 40,000 kilowatts, producing 363,085,000 kilowatt hours during the year 1950. Until October 19, 1950, such energy was sold to Buffalo Niagara Electric Corporation at the rate charged all of Niagara's customers, 3 mills per kilowatt hour. On that date Niagara was merged into Mohawk which became the successor in interest to Buffalo Niagara, and since then the five new generators have simply contributed to the requirements of Mohawk's system and no attempt has been made to identify the output of these generators.

On January 20, 1950, Niagara filed its petition with this Commission in which it sought an order authorizing it to amortize the payment of \$1,500,000 by ratable monthly charges to operating expense over the period commencing March 1, 1949, to May 1, 1967, and approving this procedure with respect to all accounting requirements, including the determination of project earnings for purposes of § 10(d) of the Federal Power Act, 16 USCA § 803(d). By order of July 11, 1950, we set a hearing in the case which was held, after postponement, on March 14 and April 4 and 5, 1951. Upon the filing of the examiner's report and exceptions thereto by the staff and by Mohawk, and upon oral argument before the full Commission, the question before us is whether Mohawk has sustained its burden of proof, which we find is imposed upon it, that its proposal to amortize the \$1,500,000 payment over an 18-year period is reasonable or appropriate for the



## FEDERAL POWER COMMISSION

purposes of the Federal Power Act, and that in the determination of the amount of amortization reserves to be established and maintained pursuant to § 10(d) of the act, the payment should be included in the determination of income as a proper operating cost. In our opinion it has not sustained that burden so that we are also required to determine what is the proper accounting treatment for this amount.

Mohawk bases its claim for amortization of the \$1,500,000 on the contention that it was a necessary expenditure to secure release from its contracts with ALCOA and to secure the advantages of selling the energy at a higher price. We find the contention not supported by the record.

[1] In its relationship with Niagara, ALCOA was given preferential treatment in that the contract rate was fixed at \$8 per mechanical horsepower per year, one-half the rate of \$16 per mechanical horsepower per year which was the equivalent of the rate of \$23 per kilowatt per year that Niagara's other customers paid for electric energy. In other words, had the power been sold to ALCOA at the same equivalent rate that Niagara's other customers paid for electric power, Niagara would have received approximately twice as much per year as it received for the 52,000 mechanical horsepower it furnished to ALCOA. When stated in terms of electric energy produced by the 52,000 mechanical horsepower during the period, Niagara actually received only  $1\frac{1}{3}$  mills per kilowatt hour for this energy, as compared with 3 mills per kilowatt hour received from electric customers.

This was so discriminatory, in fact, that had the power been sold to Niag-

ara's other customers, instead of to ALCOA, during the period 1928-1937, Niagara would have received \$6,001,687 more in revenues. This discrimination was admitted by Mohawk's President Machold in the course of the hearing as follows:

*Q.* Well, in the period of time from 1940 to 1947 was the ALCOA rate discriminatory?

*A.* Well, I suppose you could say it was discriminatory in the generally accepted view as of today, yes.

And Mohawk's witness Howell, whose duties included the formulation of Niagara's rates and the preparation of power contracts, could offer no explanation of the difference between the rate to ALCOA and the rate to Niagara's other customers.

While Mohawk contends that it was earning a fair return on its contracts with ALCOA, no adequate presentation of evidence to support this contention was made at the hearing. In 1921, the licensee refused to make a new contract with ALCOA except at its standard rates, although it immediately did make an additional contract for 3,000 mechanical horsepower with a rebate clause giving the reduced rate, which it recognized at the time as questionable. The discrimination was also pointed out in a report prepared by licensee's own rate expert, John T. Kimball, which strangely enough was given no weight by Mr. Machold.

The New York Public Service Commission had attempted to abrogate the agreements because the rate was discriminatory but in 1942 the state court of appeals held the Commission to be without jurisdiction

## RE NIAGARA MOHAWK POWER CORP.

(*Aluminum Co. of America v. Maltbie* [1942] 289 NY 357, 48 PUR NS 125, 45 NE2d 908). In such a case, § 19 of the Federal Power Act, 16 USCA § 812, provides:

" . . . in case of the development, transmission, or distribution, or use in public service of power by any licensee (hereunder) or by its customer engaged in public service within a state which has not authorized and empowered a Commission or other agency or agencies within said state to regulate and control the services to be rendered by such licensee or by its customer engaged in public service, or the rates and charges of payment therefor, . . . it is agreed as a condition of such license that jurisdiction is hereby conferred upon the Commission, upon complaint of any person aggrieved, or upon its own initiative, to exercise such regulation and control until such time as the state shall have provided a Commission or other authority for such regulation and control: . . . "

[2] Mohawk contends that the sale of power to ALCOA was not subject to our jurisdiction because made on Niagara's premises for utilization in ALCOA's plant. The meaning of "public service" is broader than this. It certainly includes sales to industries, and the place where title passes is immaterial.

[3] Furthermore, from the language of § 19, this Commission's jurisdiction attaches where the licensee or its customer is engaged in public service in any respect, and where a state Commission does not have jurisdiction to regulate the service in question. Such a situation obtained here because Niagara not only made sales to other industries but sold energy to

Buffalo Niagara Electric Corporation which sold energy to residential consumers as well as to commercial and industrial customers and other utilities.

This Commission's jurisdiction over the sale to ALCOA is confirmed by the legislative history of the Federal Water Power Act which was enacted after frequent reference to the Niagara Falls project and its relationship to ALCOA, recognizing that the act would confer regulatory jurisdiction over the sales to ALCOA. 59 Cong Rec 1101-1103, 1481-1495, 6526, 6531, 6532, H Rep No. 910, 66th Cong 2d Sess p. 13; see also *Niagara Falls Power Co. v. Federal Power Commission* (CA2d 1943) 51 PUR NS 40, 137 F2d 787, 791, 792, certiorari denied (1943) 320 US 792, 88 L ed 477, 64 S Ct 206. Furthermore, the House Conferees dropped an amendment to the bill which sought to exempt prior contracts not extending beyond the terms of the license, stating that the amendment had particular reference to the contracts at Niagara Falls and would protect contracts which could not otherwise be defended. H Rep No. 910, 66th Cong 2d Sess p. 13, April 30, 1920. See also 59 Cong Rec 6524, 6525.

[4, 5] With remedial action of this Commission so available to it, Mohawk cannot sustain its claim that its payment of \$1,500,000 was necessary to relieve it of the burden of these contracts inasmuch as it made no attempt to invoke our jurisdiction to correct the discrimination. In fact, President Machold stated that the possible jurisdiction of this Commission was not given any weight although Niagara's studies had recognized that the existence of such jurisdiction would have

## FEDERAL POWER COMMISSION

an important bearing on the consideration paid for the cancellation of the contracts. Mohawk's president also admitted that the payment probably would not have been made if Niagara could have secured the same financial advantage through regulatory action.

There is here a strong parallel to a discriminatory situation which prevailed in Wyoming in a case before the state Commission involving water rates and services by the city of Cheyenne. The Union Pacific Railroad Company had been enjoying free water service under a contract entered into in 1889. The Wyoming Commission initiated an investigation upon its own motion and in 1924 found, among other things, that such a contract resulted in "unjust discrimination against the other water consumers of the city." *Re Water Rates and Service for Cheyenne*, 5 Bien Rep Wyo PSC 174. A schedule of water rates was fixed which did away with this free service and other special rates which were found to be unduly preferential.

In this connection it is, of course, well established that contractual provisions will not prevent the application of valid regulation. *Midland Realty Co. v. Kansas City Power & Light Co.* (1937) 300 US 109, 113, 81 L ed 540, 17 PUR NS 113, 57 S Ct 345; *Union Dry Goods Co. v. Georgia Pub. Service Corp.* 248 US 372, 63 L ed 309, PUR1919C 60, 39 S Ct 117, 9 ALR 1420. In the latter case it was said (248 US at p. 377, PUR1919C at p. 64.) ". . . the right of private contract must yield to the exigencies of the public welfare when determined in an appropriate manner by the authority of the state . . . ."

95 PUR NS

Furthermore the courts have stated that there is an obligation on corporations performing a public service to take the initiative in establishing reasonable rates free of discrimination. *Georgia v. Pennsylvania R. Co.* (1945) 324 US 439, 459, 460, 89 L ed 1051, 59 PUR NS 132, 65 S Ct 716; *Pennsylvania Water & Power Co. v. Consolidated Gas, E. L. & Power Co.* (CA4th 1950) 86 PUR NS 33, 184 F2d 552, 567, certiorari denied (1950) 340 US 906, 95 L ed 655, 71 S Ct 282.

[6] Apart from the necessity of making any payment at all to ALCOA, we find that Mohawk has not sustained its burden of proof that the amount was reasonable in view of Niagara's failure to avail itself of factors extant at the time of the negotiations which, if used, might have given Niagara a bargaining advantage. Such factors included:

(1) The fact that the contracts were subject to a provision entitling ALCOA to discontinue taking one-half the mechanical horsepower only after five years' notice and the remaining half only after a further notice of five years, resulting in a penalty of \$1,921,500 for an immediate cancellation; and

(2) At the time of the negotiations there was excess capacity in the aluminum industry due to the previous expansion during the war, and, of ALCOA's five smelting works, the Niagara Falls plant was the oldest and smallest and was obsolete and less economical than its other more modern plants. In fact, after operations ceased at ALCOA's plant its president stated in a letter dated July 22, 1949, to the president of Niagara,

## RE NIAGARA MOHAWK POWER CORP.

"The termination of our operations there has been dictated by economics and not by any desire on our part to leave Niagara Falls."

As has already been stated, the record shows that Mr. Machold disregarded the report prepared by John T. Kimball (now vice president in charge of rates for Mohawk) which considered these factors highly relevant. Mr. Machold merely calculated that Niagara could afford to pay up to \$1,500,000 on the basis that the conversion of the 52,000 mechanical horsepower into electric energy and the sale of that energy at 3 mills would increase Niagara's revenues from the five turbines used to serve ALCOA from approximately \$400,000 a year to \$1,000,000. It is clear from Niagara's failure to consider ALCOA's bargaining weaknesses that Niagara was not motivated by the normal considerations governing an independent party engaged in arm's-length bargaining, but, for some reason not disclosed, had decided to make the payment of \$1,500,000 whether or not it was reasonably necessary.

[7] The payment was made, as applicant readily admits, to gain freedom from unprofitable contracts. But assuming arguendo that the applicant had shown both a necessity for the payment, and that the amount was reasonable, it has still failed to show facts justifying the proposed accounting charge to future periods of the cost of abrogating the undesirable contracts. The facts of record show that the sale of mechanical power had long been relatively less profitable than the rest of the licensee's business—approximately \$6,001,687 less profitable, during the period 1928-1937, as al-

ready pointed out. As an alternative to continuing that business, the licensee decided to take an immediate loss of \$1,500,000 and quit said business entirely. The \$1,500,000 was a loss in the mechanical power business and it was incurred at the time the payment was made terminating that business.

On the applicant's showing, there is no warrant for calling the payment an asset of new business, as it would have to be to justify charging it to the future. Clearly it was not an asset but a loss, and as a loss it was not one resulting from the new 60-cycle electric power business which the licensee thereafter entered upon.

Furthermore, transferring a past loss to the future would have the deceptive effect of overstating past profits and understating future profits. We find, therefore, that the \$1,500,000 payment would represent at best a loss suffered in the year it was made and one which may not be charged to future periods.

Finally, the charging of the cancellation payment as an operating expense would be a confirmation by the FPC of the canceled agreements notwithstanding their manifest discrimination in favor of ALCOA. Since the principal interest of the Commission in the accounting entry for this cancellation payment lies in the determination of excess earnings under § 10(d) of the Federal Power Act, upon the facts of record this payment cannot be considered in the determination of earnings under that section.

Mohawk gains nothing from its reliance on the decisions of the New York Commission and the Bureau of Internal Revenue. The New York Commission (probably because it was

## FEDERAL POWER COMMISSION

without jurisdiction over the discriminatory rate) approved the accounting entry as an operating expense, but said that it was not passing upon the reasonableness of the payment (Re Niagara Falls Power Co. [for authority to amortize, etc.], Case No. 14471, Nov. 14, 1949). The Bureau of Internal Revenue, without passing upon the question before the FPC, made a closing agreement allowing the licensee tax credits over the years up to 1967 by reason of the cancellation payment. These tax credits will, at the present tax rates, reduce the monthly charge from \$6,880.73 to \$4,381, so that the licensee will be out approximately \$954,985 instead of \$1,500,000.

The licensee claims that the canceled agreements had received the sanction of state and Federal courts, citing *United States v. Aluminum Co. of America* (1941) 44 F Supp 97, 136, 137; (1945) 148 F2d 416, 434. We are unable to find any discussion of these particular agreements in either court. The state reference was to the *Maltbie Case* above-mentioned [(1942) 289 NY 357, 48 PUR NS

125, 45 NE2d 908] which was not court approval of this agreement but a holding that the state Commission was without jurisdiction.

The Commission therefore orders:

(A) The application, filed on January 20, 1950, by the Niagara Falls Power Company (Niagara Mohawk Power Corporation, successor licensee) for an order approving the amortization by ratable monthly charges to operating expense of the amount of \$1,500,000, which it paid to the Aluminum Company of America with respect to agreements dated March 7, 1947, and March 1, 1949, is hereby denied.

(B) Petitioner shall charge off the expenditure referred to in paragraph (A) to Account 271, Earned Surplus.

(C) The charge to Account 271, Earned Surplus, ordered in paragraph (B) above shall not be considered in computing the surplus earned in excess of a specified reasonable rate of return for the purpose of establishing and maintaining amortization reserves under the provisions of § 10(d) of the Federal Power Act, 16 USCA § 803 (d).

## DISTRICT OF COLUMBIA PUBLIC UTILITIES COMMISSION

### Re Oriole Motor Coach Lines, Incorporated, Doing Business As Washington Suburban Lines

P.U.C. No. 3331, Formal Case No. 416, Order No. 3916  
September 4, 1952

**A**PPPLICATION of interstate bus company for approval of route within the District of Columbia; denied. Petition for reconsideration denied October 6, 1952.

## RE ORIOLE MOTOR COACH LINES

*Monopoly and competition, § 30 — What constitutes competition — Bus service.*

1. Separate bus lines do not have to be operated over identical routes in order to be rendering a competitive service with one another, p. 191.

*Monopoly and competition, § 62 — Bus service.*

2. An interstate motor bus carrier's request for approval of a route within the District of Columbia was denied where it appeared that the new service would be competitive with services rendered by a local transit company and for that reason would require a certificate of convenience and necessity under § 4 of the Merger Act, p. 191.

By the COMMISSION:

### *Nature of the Proceeding*

On April 18, 1952, Oriole Motor Coach Lines, Inc., doing business as Washington Suburban Lines, 7835 Eastern avenue, Silver Spring, Maryland, submitted a letter to this Commission requesting the designation of routes between its existing terminal in the District of Columbia near Georgia avenue and Eastern avenue to a proposed on-street terminal on H street, Northwest, between 12th and 13th streets.

Following this request, Capital Transit Company filed with this Commission on April 29, 1952, a protest to the granting of such extension of routes within the District of Columbia, on the principal grounds that the protestant is now rendering adequate service between the present terminal of the applicant and the proposed terminal, and that the designation of the route applied for would be in violation of § 4 of the Merger Act.

In view of the matters raised by the applicant and the protest, the Commission believed their determination required a formal public hearing, and, accordingly, issued a notice of hearing to be held on June 6, 1952.

Appearances were noted at the hearing by Capital Transit Company, Safeway Trails, Inc., and Pennsylvania

Greyhound Lines, Inc., who, without objection, were permitted to intervene in the proceedings. All interveners objected to the granting of the application.

Testimony on behalf of the applicant was presented by S. Harrison Kahn, Treasurer, Oriole Motor Coach Lines, Inc.; Charles E. Hammond, Assistant Research Engineer, Capital Transit Company, and Francis J. Ortman, Assistant Secretary and member of the Board of Directors, Safeway Trails, Inc., testified on behalf of the respective interveners.

At the hearing, Oriole amended its application to designate the use of an off-street terminal on property located at the northwest corner of 12th and H streets, Northwest, occupied by a gas-line station with a considerable paved area adjacent thereto.

### *Applicant's Position*

The witness for Oriole testified that applicant, in conjunction with Monumental Motor Tours, Inc., proposes to establish year-round service from Washington, D. C., to Atlantic City, N. J., on fixed schedules and over fixed routes. Copies of Interstate Commerce Commission certificates authorizing service over connecting routes from Washington to Baltimore (Oriole) and from Baltimore to Atlantic City (Monumental) were introduced



## DISTRICT OF COLUMBIA PUBLIC UTILITIES COMMISSION

in evidence. He stated the position of the applicant was that it has unrestricted authority from the Interstate Commerce Commission to serve all points and places in the District of Columbia, subject to the designation of the particular streets and highways within the District of Columbia by the Public Utilities Commission of the District of Columbia. Upon this basis, applicant did not believe the issue of convenience and necessity was here before this Commission, and that § 4 of the Mergers Act (§ 44-201 DC Code 1940 Ed.) was not applicable to this proceeding. No testimony was offered by applicant to demonstrate the convenience or necessity for the proposed operation.

Oriole Motor Coach Lines, Inc., and its predecessor have operated for several years between points in Maryland and a terminal in the District of Columbia near Georgia and Alaska avenues, Northwest, adjacent to the Maryland line. Its tariffs on file with the Interstate Commerce Commission provide charges from points in Maryland to the terminal at Georgia and Alaska avenues and other charges at an additional differential of 15 cents for transportation to points in downtown Washington. Neither the applicant nor its predecessor has ever operated to points in downtown Washington. The present proposal contemplates three trips per day, between Washington and Atlantic City, and does not contemplate, at this time, any pick-up or discharge in the District other than at its existing terminal and the proposed downtown terminal. The application proposes and the witness testified that "no intra-District passengers will be carried." The witness testified

that Oriole had authority from the Interstate Commerce Commission which would permit the picking up of passengers at the proposed downtown terminal for transportation to Ashton, Maryland, or some intermediate point beyond the Georgia avenue terminal. He testified further that, if a demand developed for additional service by Oriole, the applicant would seek to install and operate many schedules.

### *Interveners' Position*

The witness for Capital Transit testified that the existing terminal of the applicant near Georgia and Alaska avenues is within 100-150 feet of the bus and streetcar terminal of Capital Transit at Georgia and Alaska avenues, Northwest. He also pointed out that the proposed route to the proposed terminal on H street coincides with all but a small portion of route of Capital Transit's 16th street bus line.

In order to determine the amount of competition which would be engendered by such an extension of Oriole's service, Capital Transit made a 3-day count of passengers transferring between Oriole service from Maryland and Capital Transit service within the District of Columbia, at the Georgia and Alaska avenues terminal. He found that the 18-hour daily average was 1,701 revenue passengers using both services. By assuming that all of such passengers would use Oriole service to and from the proposed downtown terminal, he estimated that at the average District of Columbia fare of Capital Transit the potential annual loss to Capital Transit would be \$68,500. He further testified that there was a certain portion of the Maryland routes of both Capital Transit and Oriole in that area, which he termed

## RE ORIOLE MOTOR COACH LINES

a competitive zone. During the period of the survey, a daily average of 244 passengers used Oriole service from points in the competitive area to the Georgia and Alaska avenues terminal.

On the assumption that passengers originating in the competitive area would continue to patronize Oriole to and from the proposed downtown terminal, the witness estimated that the maximum annual loss would be \$14,827. He also testified that in his opinion other passengers originating outside of the so-called competitive area might continue to ride Oriole's vehicles to and from its proposed downtown terminal, and that the loss of passengers from such areas would be in addition to the calculated maximum loss of \$14,827 from the competitive area.

It was the opinion of the witness for Capital Transit, and the company's contention, that an indeterminate number of passengers found by the survey to be using both Oriole and Capital Transit service would discontinue the use of Capital Transit vehicles in the District of Columbia and would use the busses of Oriole in traveling between points in Maryland and downtown Washington if the application were granted. Capital Transit's witness testified that other passengers transported by it between the Georgia and Alaska avenues terminal and downtown areas would shift to Oriole, which would have an additional adverse effect on Capital Transit's revenues. He further testified that the competition between Oriole and Capital Transit in the so-called competitive zone in Maryland would be minimized, if the application should be approved, by prohibiting Oriole from picking up

and discharging passengers between the proposed downtown terminal and the limits of the so-called competitive area at Forest Glen road on Georgia avenue and at Old Bladensburg road on the Colesville road.

In view of the testimony, Capital Transit Company contends, therefore, that the actual and potential competition that would arise from the granting of the application requires proof that the extended operation is necessary for the convenience of the public, and the issuance of a certificate by this Commission of such necessity under § 4 of the Merger Act.

Witness for Safeway Trails testified that the proposed off-street terminal on H street had inadequate facilities for handling passengers and such limited area for loading of busses that it would cause considerable confusion in traffic at that location. In his opinion, prospective passengers would be apt to use the nearby Safeway Trails' terminal for waiting station facilities.

### *Conclusions*

[1,2] In Order No. 936, PUR 1931D 438, as amended, this Commission ordered that no Class A busses would be permitted to use curb terminal in a defined downtown area, which includes the proposed on-street terminal. Since the applicant has amended its application to provide for an off-street terminal, it is not necessary to consider the protests against the use of an on-street terminal in this proceeding. Likewise, the alternative provision suggested by Capital Transit, that the Commission limit transportation of passengers between the District of Columbia and certain points in the state of Maryland, is a condition that this Commission has no authority

## DISTRICT OF COLUMBIA PUBLIC UTILITIES COMMISSION

to impose. There appears small likelihood that the presently proposed three trips per day would result in the substantial loss in revenue indicated by the maximum amounts developed by the Capital Transit survey. However, testimony in this proceeding shows that the applicant has authority from the Interstate Commerce Commission to operate between Washington and points in Maryland in the adjacent metropolitan area, and that if there should be a demand for many schedules the applicant would seek to install and operate many schedules. Such operation would be along the proposed route which is over streets now served by lines of Capital Transit, except for a few blocks. It is the opinion of the Commission that separate bus lines do not have to operate over identical routes to render competitive service.

In *Capital Transit Co. v. Elgen*, Civil Action No. 971, the United States district court for the District of Columbia, on January 19, 1939, held that to transport passengers from a terminal in Virginia near the District line to points in downtown Washington required a certificate under § 4 of the Merger Act, and enjoined such operation without a certificate. In Formal Case No. 376, April 26, 1948, this Commission denied the application of Anchorage Transportation, Inc.

(predecessor of the applicant), to designate routes between the terminal at Georgia and Eastern avenues, Northwest, to points in downtown Washington for the transportation of interstate passengers, on the ground that such operations required a certificate under § 4 of the Merger Act.

From the foregoing, it is the opinion of the Commission that to permit the extension of the bus operations of the applicant between its terminal in the District of Columbia at Georgia and Eastern avenues, Northwest, to points in downtown Washington over the proposed route and on fixed schedules would be competitive with the services now rendered by Capital Transit and would, for that reason, require a certificate of public convenience under § 4 of the Merger Act. Since the applicant has failed to produce evidence upon the question of public convenience, and takes the position that § 4 of the Merger Act does not apply to the proposed operation, it is the opinion of the Commission that the application should be denied. Therefore,

*It is ordered:*

That the application of Oriole Motor Coach Lines, Inc., doing business as Washington Suburban Lines, filed April 18, 1952, be, and it is hereby, denied.



# Industrial Progress

*A digest of information on new construction by privately managed utilities; similar information relating to government owned utilities; news concerning products, supplies and services offered by manufacturers; also notices of changes in personnel.*



## Montana Power Plans to Spend \$27,000,000 for Expansion

MONTANA POWER COMPANY has a twenty-seven million dollar building program covering the next two years, according to J. E. Corette, Jr., president. The company has spent approximately \$5,000,000 during the current year.

The 1953-1954 program involves the completion of the third generating unit at the Kerr hydroelectric development near Polson; building additional electric transmission and distribution lines to keep ahead of the service area's growth and continued exploration of company-owned lands in Alberta and elsewhere to develop additional natural gas reserves.

## G-E Issues Bulletin on Use of Two-way Radio

A NEW 8-page illustrated booklet, published by General Electric Company, discusses the use of two-way radio for better coordination of men, materials, and machines.

The booklet, titled "Instant Communication," is slanted to those businesses using materials handling and emergency service equipments, and others who have plant protection problems. It outlines the use of two-way radio in numerous industries, and shows G-E equipment now available for a wide variety of applications.

The new publication also carries a list of 27 G-E offices throughout the U. S., from which advisory service is now available on communications problems.

Copies are available free on request to Advertising Inquiry Section, General Electric Co., Electronics Park, Syracuse, New York.

## Consumers Power to Spend \$55,000,000 in 1953

CONSUMERS POWER CO. expects to spend at least fifty-five million dollars for construction in 1953, according to a recent announcement. It spent about \$57.6 million for building work this year.

## New RCA Remote Control Unit For Mobile Communication

A NEW remote control unit for use with mobile radio communication systems was announced recently by the engineering products department of the RCA Victor Division, Radio Corporation of America. The new unit is designed for use with RCA's Carfone and "Fleetphone" systems, and can be incorporated into all other mobile systems operating in the 30-50 or 152-174 megacycle bands.

The RCA Type CC-8A consists of a speech amplifier, power supply, speaker amplifier, loudspeaker, and complete set of controls. Operating over a single pair of telephone wires, it controls a remote receiver and transmitter by a system of relays. Dual transmitter selection is provided. Satisfactory operation is accomplished over distances of 10 miles between the control point and the remote equipment. The actual distance is limited only by the quality of the telephone circuits, RCA states.

## L. I. Lighting Puts 100,000 Kilowatt Unit in Service

LONG ISLAND LIGHTING COMPANY has placed in operation a 100,000-kilowatt generator at its Glenwood Landing station in Glenwood, Long Island.

This installation marks the initial step in a fifty million dollar program designed to almost double the company's electric generating facilities by 1954. It provides the company with one of the most modern and efficient power stations in the country. The generator is unique in that it is one of the few units in the country designed and equipped to burn coal from Pennsylvania or West Virginia, oil from Venezuela or natural gas from Texas.

A duplicate generator now is being constructed by the company at Far Rockaway, L. I., which is scheduled to go in operation in 1953 and a second unit at Glenwood will be in service by 1954. Long Island Lighting also plans construction of a complete new plant at Island Park, L. I.

## Exide Introduces New Line Two and Three Cell Batteries

A NEW line of two-cell and three-cell industrial batteries in transparent plastic containers for stationary small power applications is announced by The Electric Storage Battery Company.

Known as the Exide-Tytex, Type COE, the new batteries combine highly sustained useful voltages and long trouble-free life with greatly reduced operating and maintenance costs.

(Continued on page 26)



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### Cleveland Electric Plans \$3,000,000 Program

CLEVELAND ELECTRIC ILLUMINATING COMPANY has announced plans for construction of four new electric substations in Lake County, Northwestern Ohio, within the next two years. Total cost is estimated at around three million dollars.

The program, according to Elmer L. Lindseth, president, calls for the one transmission substation and three distribution substations, the first of which is already under construction in Wickliffe, Ohio. The Wickliffe substation is scheduled for completion early in 1953 and will be followed by a substation in Mentor Township and a third distribution substation in Concord Township in the spring of 1954.

### Delta-Star Electric Merged Into H. K. Porter Company, Inc.

DELTA-STAR ELECTRIC COMPANY has been merged into the parent company, H. K. Porter Company, Inc. and will operate as Delta-Star Electric Division, it was announced by T. M. Evans, president.

Policies, management, and operation of the new Delta-Star Electric Division will remain the same, with C. S. Beattie continuing as general manager of the division.

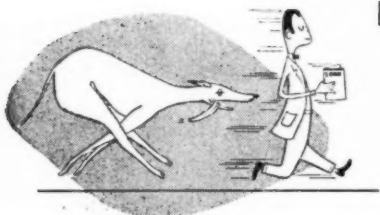
Both Mr. Beattie and R. E. Anderson have been elected vice presidents of H. K. Porter Company, Inc.

### United Gas Corp. Expansion Project Completed

UNITED GAS CORPORATION recently announced the completion of a one hundred and twenty-nine million dollar construction project, making the company the first in the world capable of handling a trillion cubic feet of natural gas annually, according to the announcement.

Involving the laying of nearly 1,000 miles of pipe line, the expansion project boosted United Gas daily delivery capacity to around four billion cubic feet of gas daily, compared to three billion in the previously existing system.

(Continued on page 28)



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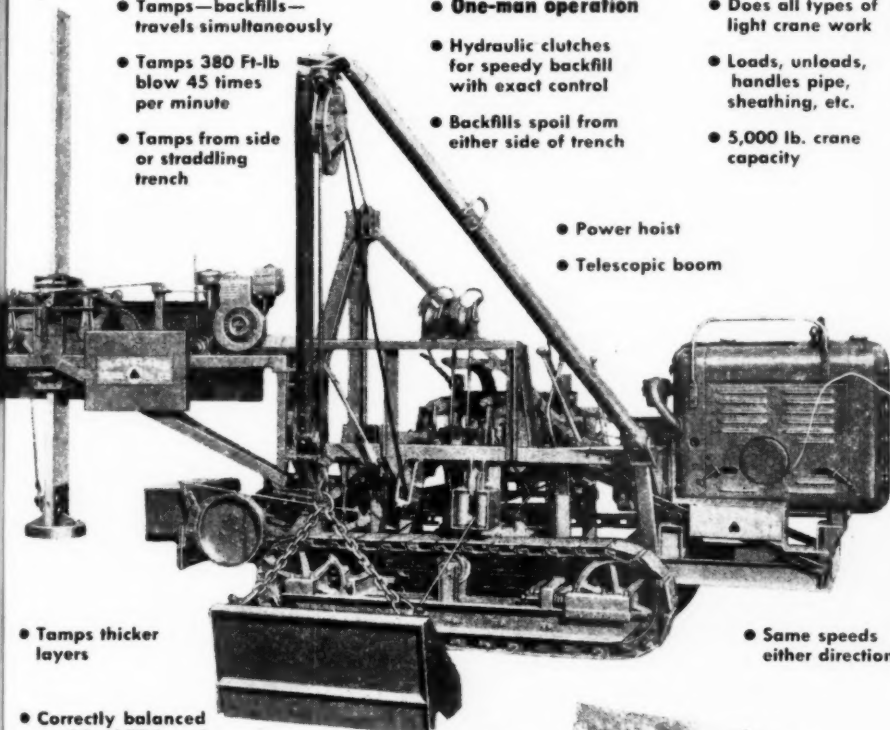
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The new facilities are located in Texas, Louisiana and Mississippi. Construction was started about 18 months ago. The new pipe lines were laid over United's existing system like a grid, extending from fields in south Texas and off the coast of Louisiana, up into north Louisiana and north central Mississippi. In addition, the company erected 11 dehydration plants with a capacity of 1.1 billion cubic feet of gas daily. It also built or enlarged eight compression stations and raised five suspension-type bridges to carry its pipe lines across rivers.

United's expanded system is connected to more than 250 gas fields and serves some 460 towns and cities with natural gas, either wholesale or retail, as well as over 2,000 direct industrial customers, according to the company's announcement.

## Kuljian Appointment

ARTHUR H. KULJIAN, chief mechanical engineer for The Kuljian Corporation, engineers and constructors, Philadelphia, has been elected vice president in charge of engineering, according to an announcement by James L. Cherry, executive vice president.

Mr. Kuljian has had wide experience in the design and engineering of steam electric power stations, industrial plants, boiler house extensions, and chemical plants, both in this country and abroad. Among the projects he has supervised are the Florida Power Corporation's Higgins Plant at Booth Point, Florida, the Bokaro Thermal Power Plant in India, and the Palermo Steam Power Plant at Palermo, Sicily.

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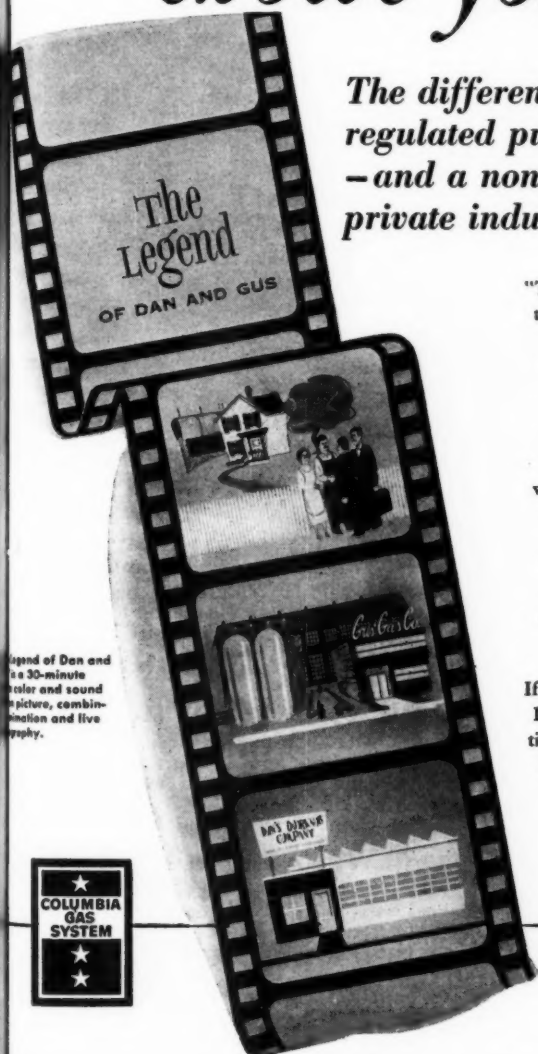
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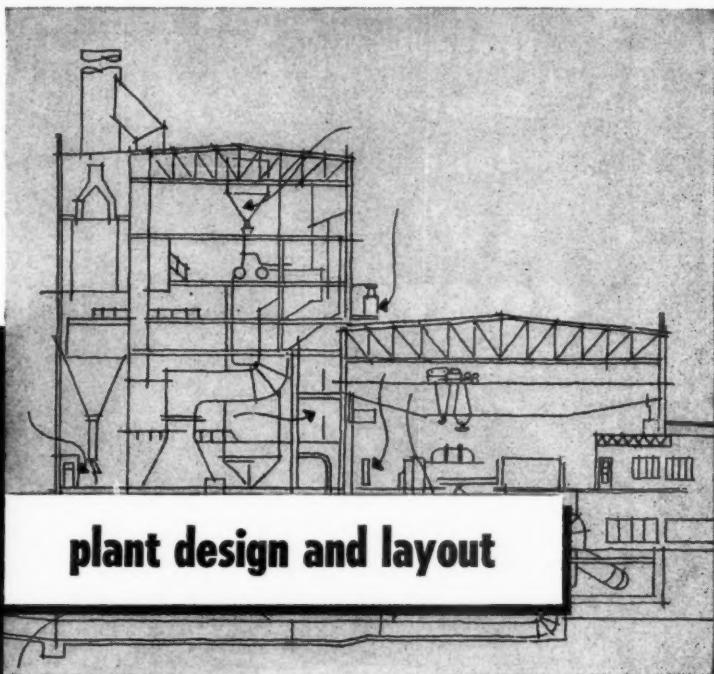
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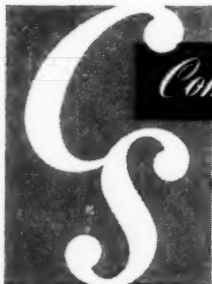


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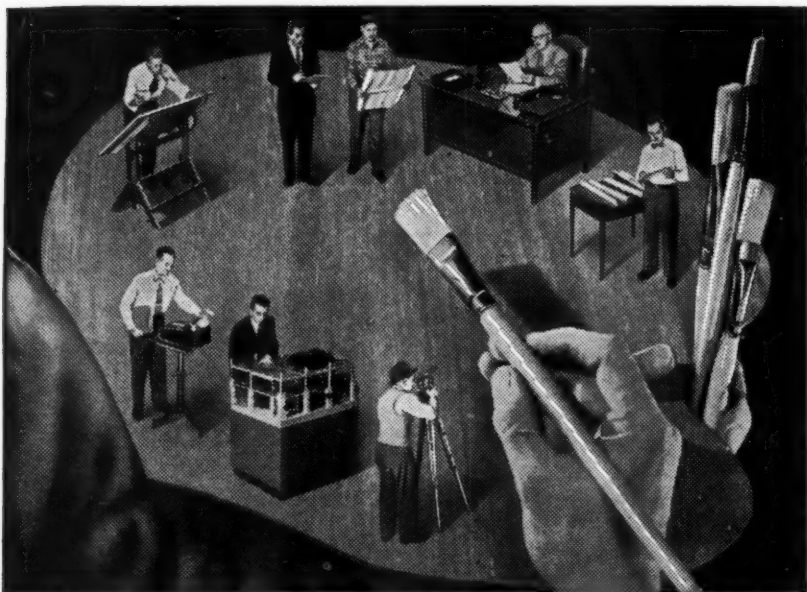
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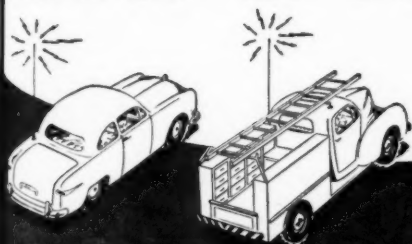
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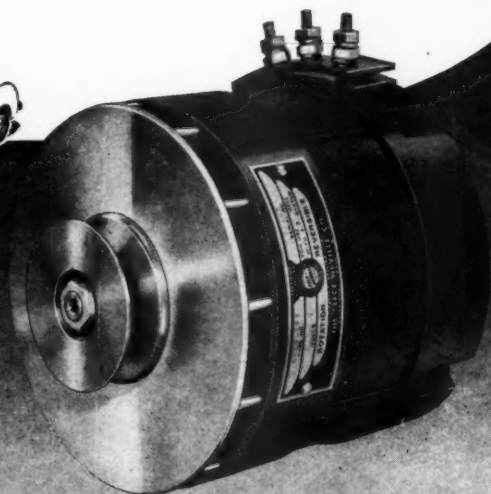


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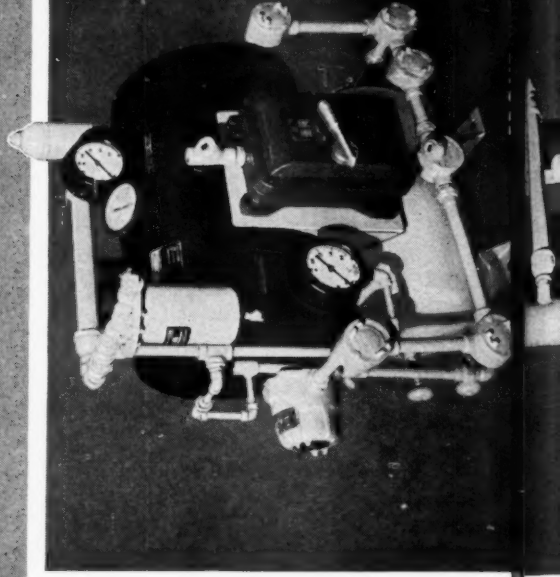
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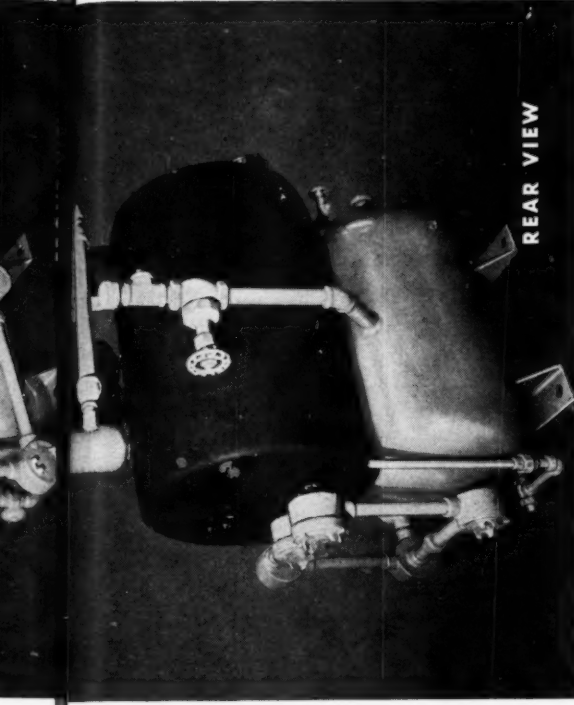
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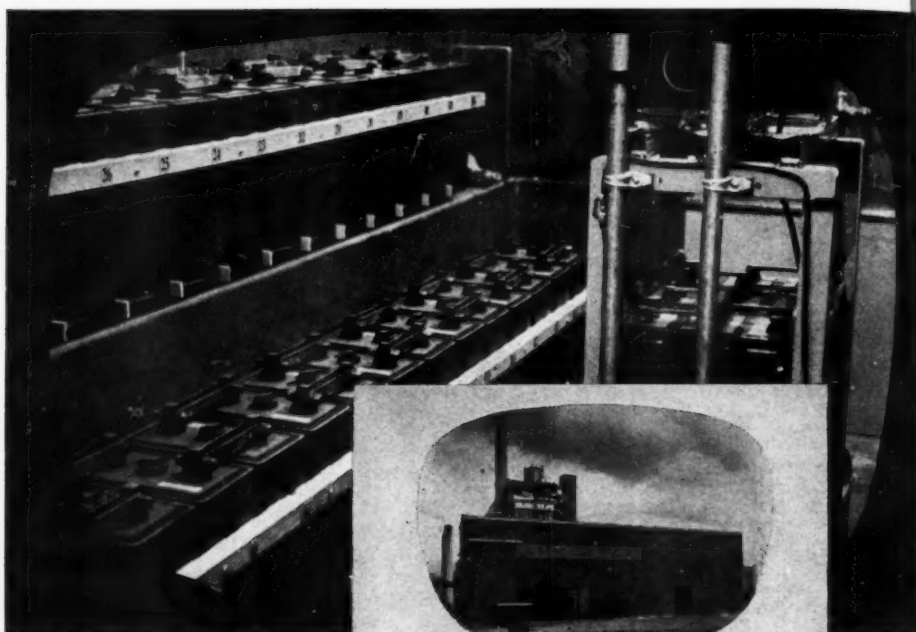
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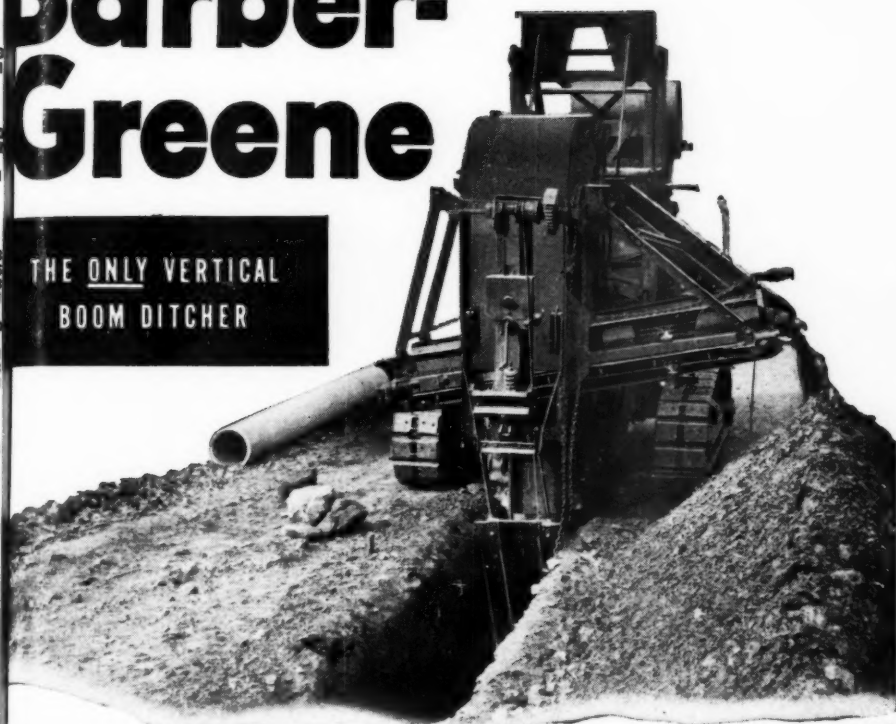
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HIGH-SPEED SAFETY, LOW MAINTENANCE, RECTANGULAR PATTERN WITH G-E FORM 109 LUMINAIRES

## Safe speed with G-E Form 109's on two New Jersey Turnpike bridges

**NO NIGHT FATALITY** has occurred on the two New Jersey Turnpike bridges illuminated by G-E Form 109 luminaires, despite heavy traffic averaging 84,000 vehicles during every 24-hour period. The Form 109's make safe, high-speed driving possible where the New Jersey Turnpike bridges the Hackensack and Passaic Rivers, and warn motorists of the change from the usual straight-away travel.

**USE FILAMENT LAMPS.** Average intensity of 0.6 footcandles on the concrete roadway is provided by 133 G-E Form 109's equipped with 10,000-lumen, 20-ampere filament lamps, at a mounting height of 30 feet to light center, with 100-

foot staggered spacing. Poles are isolated from the road area with a special bracket mount which mounts them over the side of the bridge structure.

**LOW MAINTENANCE.** The G-E Form 109 luminaire gives you the flexibility of using either mercury or filament lamps, the economy of G-E standardization, and extremely high light utilization. You are assured of minimum maintenance cost with quick, easy relamping and low glass breakage. For information, ask your General Electric representative for Bulletin GEA-5418, or write Section 452-135E, General Electric Company, Schenectady 5, New York.

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